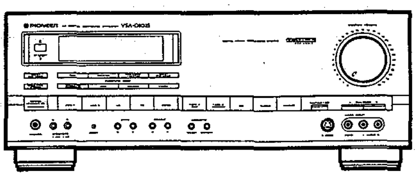
PIONEER®
The Art of Entertainment

Service Manual



ORDER NO.
ARP2755

AV DIGITAL SURROUND AMPLIFIER

VSA-D802S

VSA–D802S HAS THE FOLLOWING :

Type	Power Requirement	Remarks
HEZ	AC220V–230V, 240V (Switchable)*	
HB	AC220V–230V, 240V (Switchable)*	
HL	AC220V–230V, 240V (Switchable)*	

*Change the connection of the power transformer's primary wiring.

- **This manual is applicable to VSA–D802S/HEZ, HB and HL.**
- **For HB and HL types, refer to page 68.**

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1. EXPLODED VIEWS, PACKING AND PARTS LIST

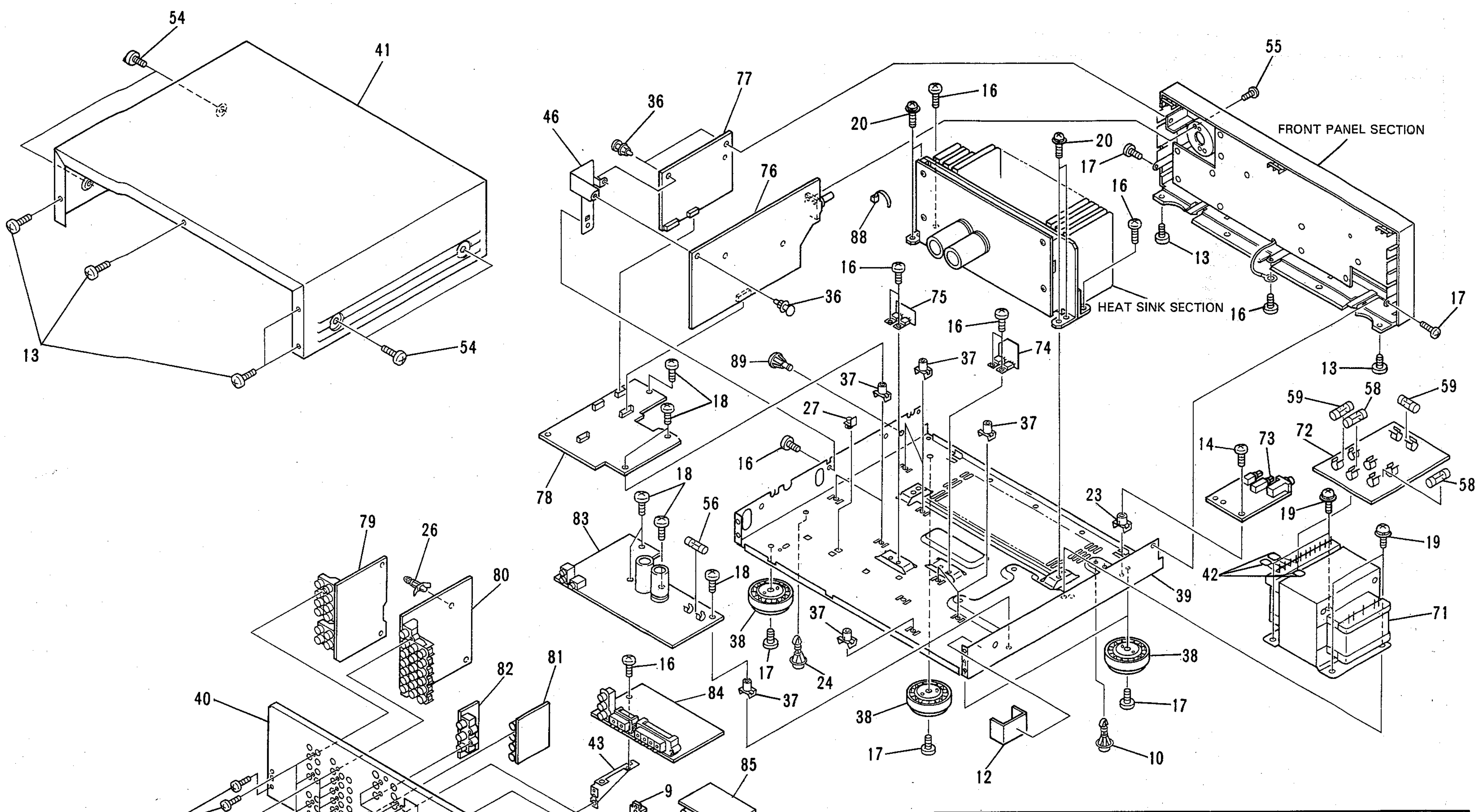
NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List of Exterior and Packing

Mark	No.	Description	Parts No.
	1	MASTER VOL ASSY	AAB1119
	2	BALANCE BUTTON	AAD2282
	3	ACRYLIC PANEL	AAK2312
	4	SP BUTTON (PLS)	AAD2211
	5	FL FILTER	AAK2364
	6	PANEL BASE	AMB2003
	7	....	
	8	....	
	9	CENTER SPEAKER SELECTOR SWITCH (S3)	AKX1004
NSP	10	SPACER	AEC1360
	11	....	
NSP	12	BARRIER (PVC)	AEC1440
	13	SCREW	ABA1006
	14	SCREW	ABA1024
	15	NAME PLATE (METAL)	VAM1032
	16	SCREW	ABA-298
	17	SCREW (STEEL)	ABA1009
	18	SCREW	ABA1018
	19	SCREW (STEEL)	ABA1053
	20	SCREW	ABA1054
	21	SCREW	ABA1082
⚠	22	AC POWER CORD	ADG1049
NSP	23	PCB MOULD	AMR2115
NSP	24	PCB HOLDER	AEC1097
	25	MICA SHEET	AEC1140
NSP	26	PCB SUPPORT	AEC1215
NSP	27	PCB HINGE	AEC1407
	28	MICA SHEET	AEE1014
⚠	29	STRAIN RELIEF	AEC-882
NSP	30	ALKALINE (LR6, AA)	AEX1007
	31	FRONT REAR PAD	AHA1503
	32	PACKING CASE	AHD2555
	33	PACKING SHEET	AHG1021
NSP	34	TERMINAL SCREW	AKE-031
	35	FRONT PANEL	ANB1561
	36	RIVET (PLASTIC)	AMR1066
NSP	37	PCB MOULD	AMR1525
	38	FOOT ASSY	AMR2414
NSP	39	CHASSIS	ANA1178
NSP	40	REAR PANEL	ANC1928
	41	METAL BONNET (MTL)	ANE1373
⚠	42	MYLAR CAPACITOR (C10—C12)	CQMA104K250
NSP	43	PCB HOLDER A	ANG-516
NSP	44	SUB TRANS HOLDER	ANG1393
NSP	45	POWER ASSEMBLY HOLDER -F	ANG1575
NSP	46	PCB HOLDER	ANG1670
NSP	47	POWER ASSEMBLY HOLDER -R	ANG1683
NSP	48	HEAT SINK	ANH1399
	49	OPERATING INSTRUCTIONS (ENGLISH/FRENCH/GERMAN/ITALIAN)	ARE1281
	50	OPERATING INSTRUCTIONS (DUTCH/SWEDISH/SPANISH/PORTUGUESE)	ARC1429
	51	FL. U-COM ASSEMBLY	AWK1729
	52	REMOTE CONSOLE UNIT (CU-VSA024)	AXD1363
	53	SCREW	BPZ26P080FMC
	54	SCREW	FBT40P060FZK
	55	SCREW	VMZ30P060FCU
⚠	56	FUSE (T2.5A, FU1)	AEK-512
	57	....	
⚠	58	FUSE (T2.5A, FU3, 4)	AEK-512
⚠	59	FUSE (T1.25A, FU5, 6)	AEK-509
	60	....	
⚠	61	TRANSISTOR (Q1)	2SC3281
⚠	62	POWER TRANSISTOR (Q10)	2SA1803
⚠	63	TRANSISTOR (Q2)	2SC3281
⚠	64	TRANSISTOR (Q3)	2SA1302
⚠	65	TRANSISTOR (Q4)	2SA1302
⚠	66	TRANSISTOR (Q5)	2SC3182N
⚠	67	TRANSISTOR (Q6)	2SA1265N
⚠	68	POWER TRANSISTOR (Q7)	2SC4688
⚠	69	POWER TRANSISTOR (Q8)	2SC4688
⚠	70	POWER TRANSISTOR (Q9)	2SA1803
⚠	71	POWER TRANSFORMER (T1)	ATS1435
NSP	72	TRANS TERMINAL ASSEMBLY	AWZ4268
NSP	73	SP SW ASSEMBLY	AWZ4535
NSP	74	REG (5.6V) ASSEMBLY	AWZ4267
NSP	75	REG (12V) ASSEMBLY	AWZ4266
	76	VOLUME ASSEMBLY	AWZ5004
◉	77	DSP ASSEMBLY	AWZ4294
	78	CONNECTION ASSEMBLY	AWZ4385
	79	AUDIO FUNCTION ASSEMBLY	AWZ5001
	80	A/V FUNCTION ASSEMBLY	AWZ5002
	81	S TERM ASSEMBLY	AWQ1017
NSP	82	PRE OUT ASSEMBLY	AWZ4386
	83	POWER SUPPLY ASSEMBLY	AWZ4999
	84	REAR SP CENTER SP ASSEMBLY	AWZ5000
NSP	85	FRONT SP ASSEMBLY	AWZ4997
	86	AMP ASSEMBLY	AWZ4998
NSP	87	PCB HOLDER	ANG1726
NSP	88	BINDER	AEC-093
NSP	89	PCB SPACER	AEC1072
	90	SCREW	ABA1047

● EXTERIOR


54
41
13
54
77
36
46
76
36
20
16
20
17
16
88
16
75
74
16
55
FRONT PANEL SECTION
HEAT SINK SECTION
13
16
17
13
89
37
37
37
27
18
78
16
18
56
83
18
38
17
24
37
38
17
10
12
37
84
16
23
39
42
71
19
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72
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81
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43
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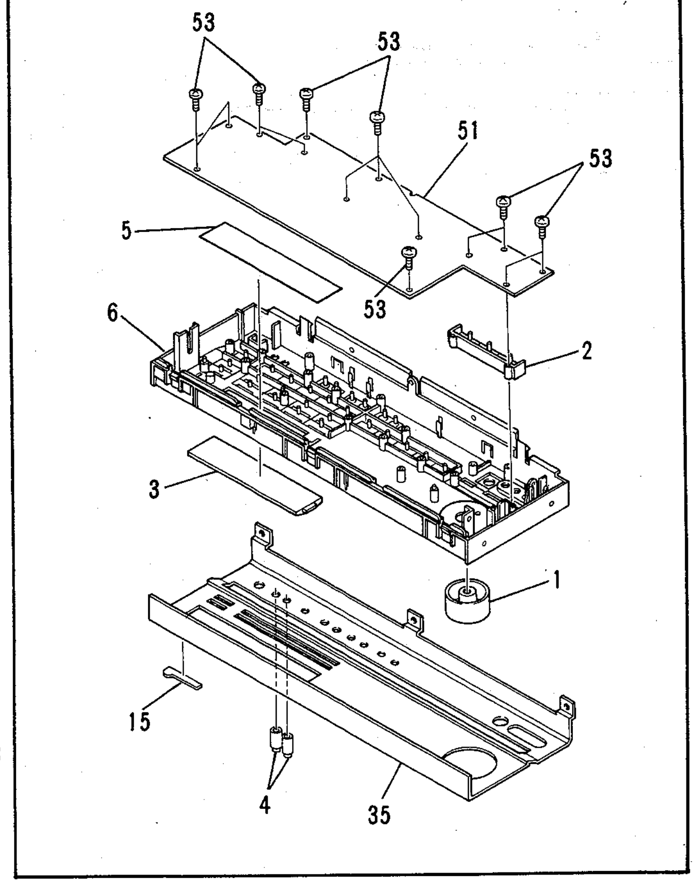
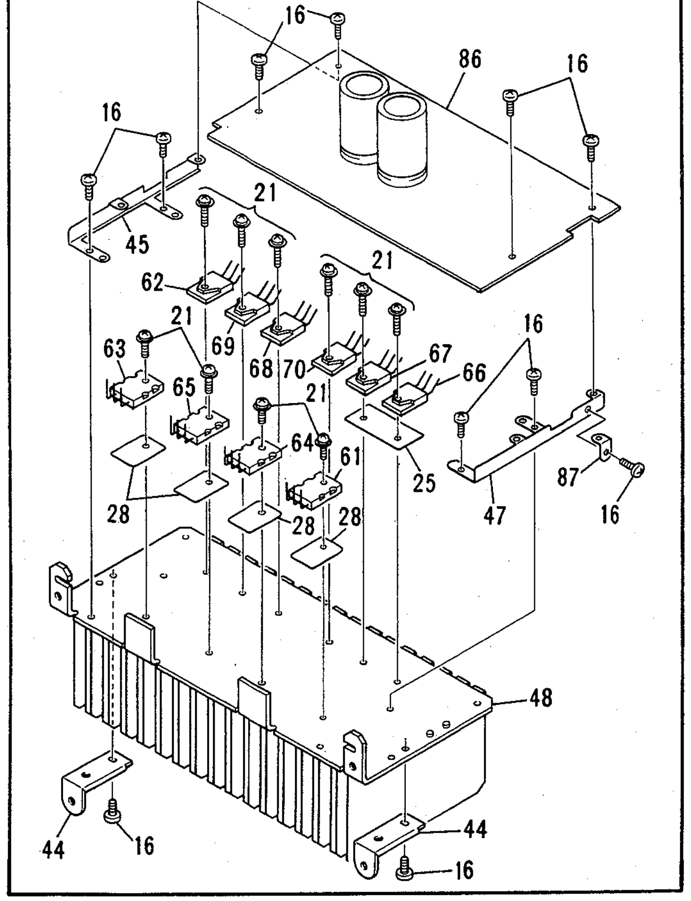
85
16
34
90
22
29

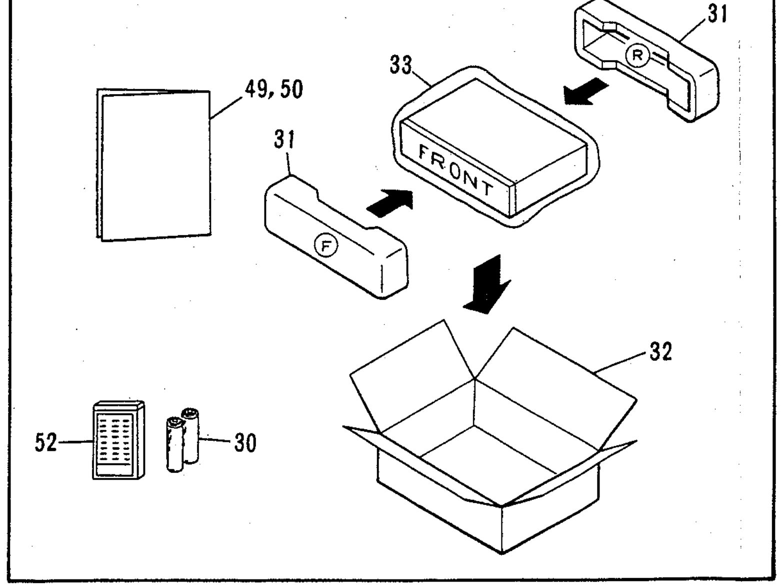
FRONT PANEL SECTION


53
53
51
53
5
53
6
2
3
1
15
4
35

HEAT SINK SECTION


16
86
16
16
45
21
62
21
69
68
70
67
66
63
65
21
64
61
25
47
87
16
28
28
28
48
44
16
44
16

● PACKING

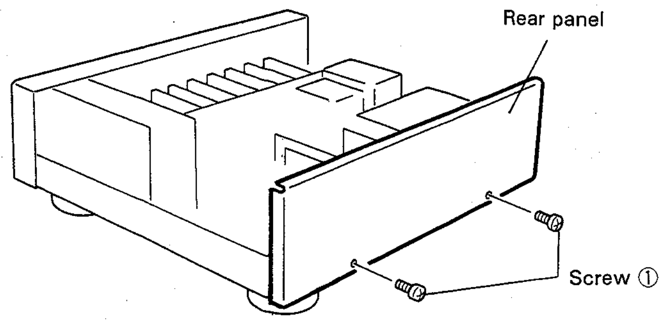

31
49, 50
33
31
FRONT
Ⓡ
Ⓕ
32
52
30

NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

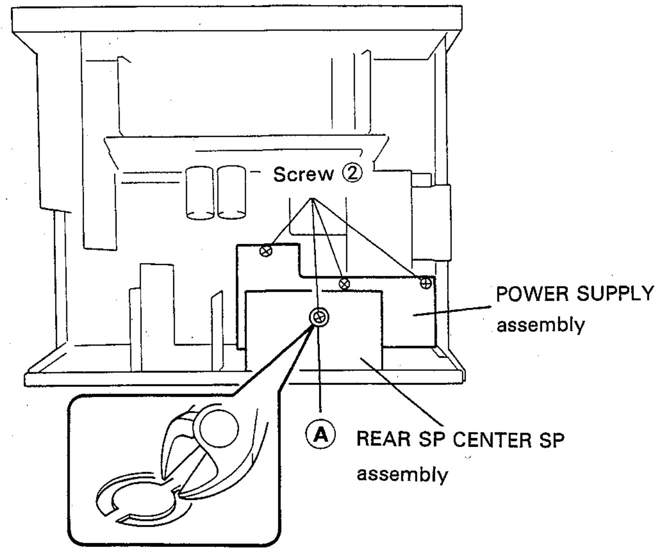
2. DISASSEMBLY

2.1 POWER SUPPLY ASSEMBLY

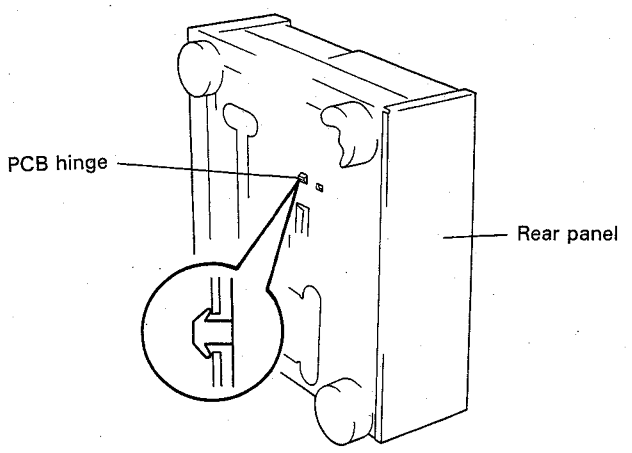
1. Remove the bonnet case (8 screws).
2. Remove the screws on the rear panel. (two screws ①).


Rear panel
Screw ①

3. Use nippers to cut at Ⓐ in the REAR SP CENTER SP assembly.
4. Remove the screws on the POWER SUPPLY assembly. (four screws ②)

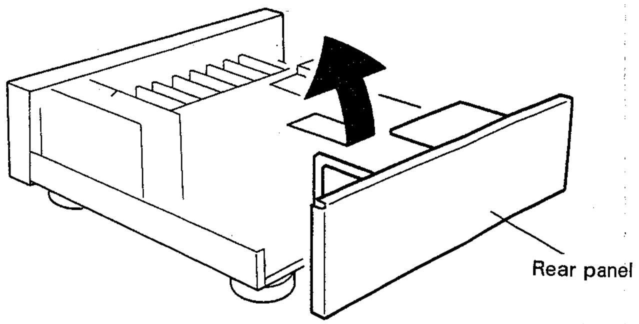

Screw ②
POWER SUPPLY assembly
Ⓐ
REAR SP CENTER SP assembly

5. Stand the unit upright, and use fine-nosed pliers to press in the PCB hinge on the bottom plate.


PCB hinge
Rear panel

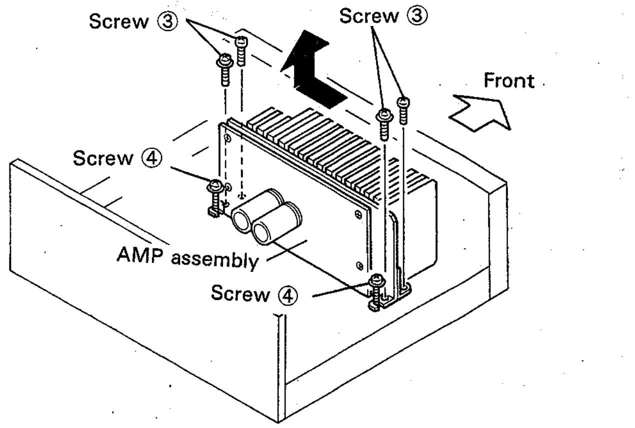
> ***Note :***
> ***Avoid shorting the unit by using an insulation sheet or similar between transformer TP and other assemblies when positioning the unit securely.***

6. Return the unit to its original position. Pull the rear panel toward the operator and securely place it so that the side with the POWER SUPPLY assembly buttons are visible.

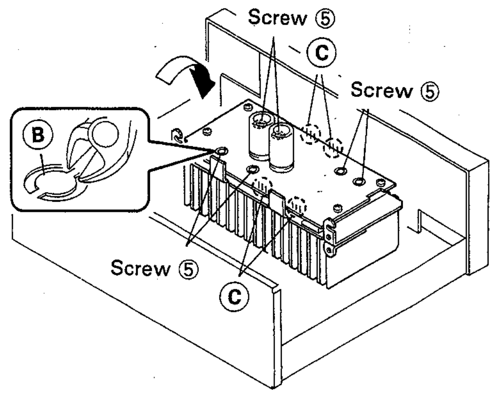


2.2 AMP ASSEMBLY

1. Remove the four heat sink locking screws ③ and loosen the two regular screws④.
2. Cut the binder with nippers.

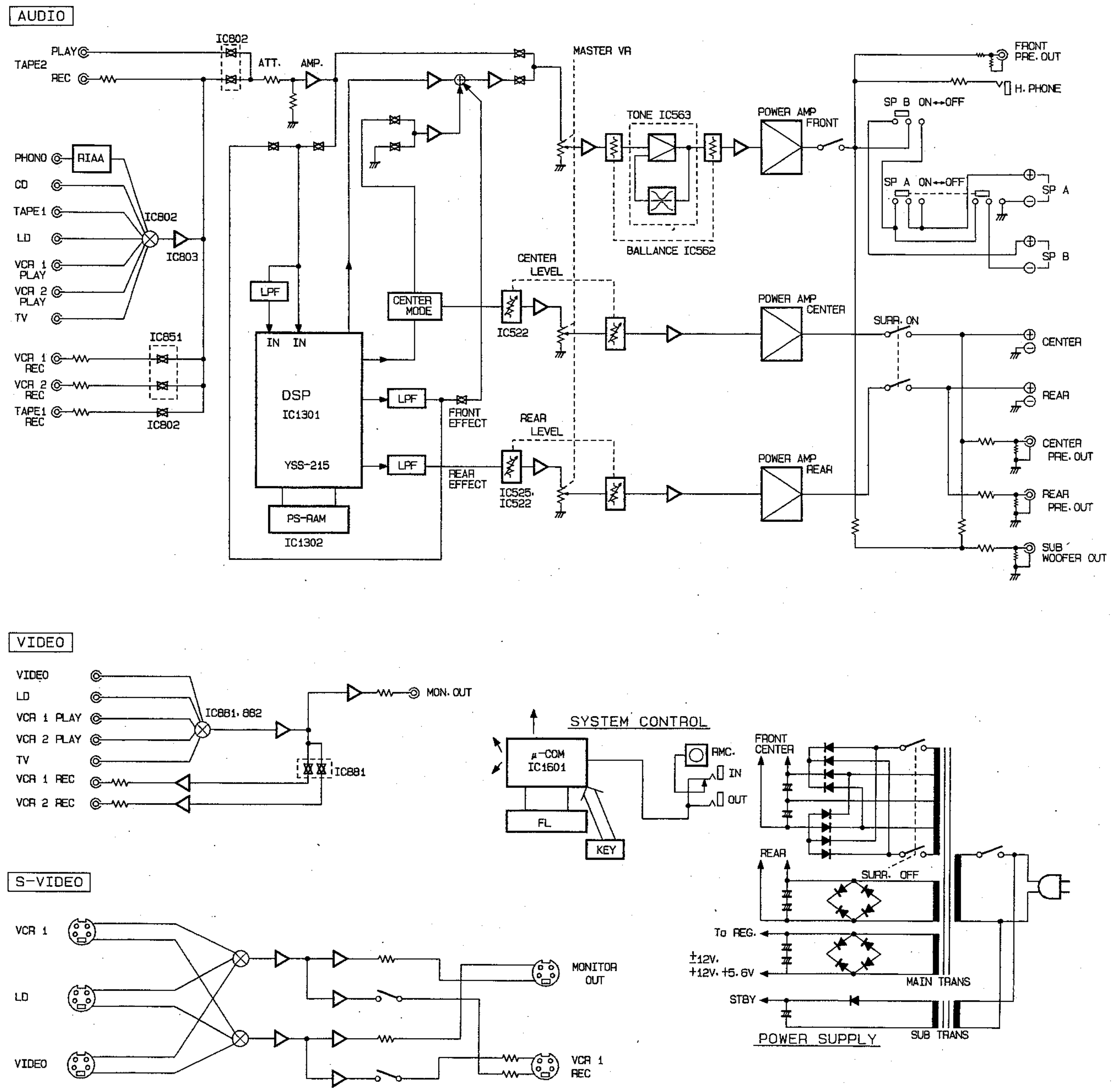

Screw ③
Screw ③
Front
Screw ④
AMP assembly
Screw ④

3. Cut the AMP assembly at Ⓑ with nippers and then remove the six screws ⑤.
4. Remove the transistor solder at Ⓒ (four locations).


Screw ⑤
Ⓒ
Screw ⑤
Ⓑ
Screw ⑤
Ⓒ

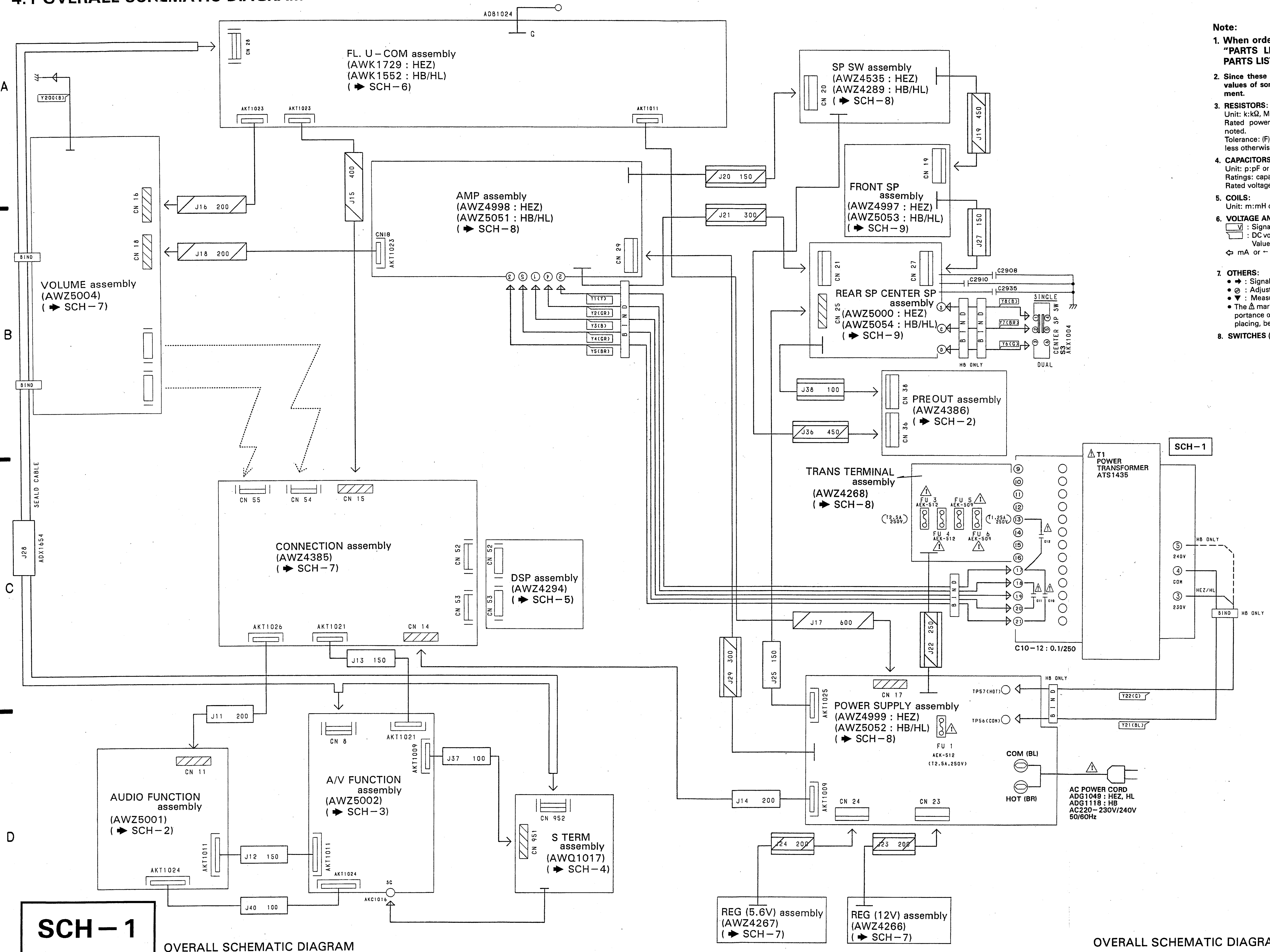
---

3. BLOCK DIAGRAM


AUDIO
TAPE2
PLAY
REC
IC802
ATT.
AMP.
MASTER VR
PHONO
RIAA
CD
TAPE1
LD
VCR 1 PLAY
VCR 2 PLAY
TV
IC802
IC803
IC851
VCR 1 REC
VCR 2 REC
TAPE1 REC
IC802
LPF
IN IN
DSP
IC1301
YSS-215
PS-RAM
IC1302
CENTER MODE
LPF
FRONT EFFECT
LPF
REAR EFFECT
CENTER LEVEL
IC522
REAR LEVEL
IC525, IC522
TONE IC563
BALLANCE IC562
POWER AMP FRONT
POWER AMP CENTER
POWER AMP REAR
FRONT PRE. OUT
H. PHONE
SP B ON↔OFF
SP A ON↔OFF
SP A
SP B
SURR. ON
CENTER
REAR
CENTER PRE. OUT
REAR PRE. OUT
SUB WOOFER OUT
VIDEO
VIDEO
LD
VCR 1 PLAY
VCR 2 PLAY
TV
VCR 1 REC
VCR 2 REC
IC881, 882
IC881
MON. OUT
SYSTEM CONTROL
μ-COM IC1601
FL
KEY
RMC.
IN
OUT
S-VIDEO
VCR 1
LD
VIDEO
MONITOR OUT
VCR 1 REC
FRONT CENTER
REAR
SURR. OFF
To REG.
±12V.
+12V. +5.6V
STBY
MAIN TRANS
SUB TRANS
POWER SUPPLY

4. SCHEMATIC AND PCB CONNECTION DIAGRAMS

4.1 OVERALL SCHEMATIC DIAGRAM


ADB1024
FL. U-COM assembly
(AWK1729 : HEZ)
(AWK1552 : HB/HL)
(➡ SCH-6)
CN 26
AKT1023
AKT1023
AKT1011
Y200(B)
VOLUME assembly
(AWZ5004)
(➡ SCH-7)
CN 16
CN 18
J16 200
J18 200
J15 400
AMP assembly
(AWZ4998 : HEZ)
(AWZ5051 : HB/HL)
(➡ SCH-8)
CN18
AKT1023
CN 29
Y1(Y)
Y2(GR)
Y3(B)
Y4(GR)
Y5(BR)
BIND
SEALD CABLE
J28
ADX1654
J20 150
J21 300
SP SW assembly
(AWZ4535 : HEZ)
(AWZ4289 : HB/HL)
(➡ SCH-8)
CN 20
J19 450
FRONT SP
assembly
(AWZ4997 : HEZ)
(AWZ5053 : HB/HL)
(➡ SCH-9)
CN 19
J27 150
REAR SP CENTER SP
assembly
(AWZ5000 : HEZ)
(AWZ5054 : HB/HL)
(➡ SCH-9)
CN 21
CN 27
CN 25
C2908
C2910
C2935
Y8(B)
Y7(BR)
Y6(C)
SINGLE
DUAL
CENTER SP SW
S3
AKX1004
HB ONLY
J38 100
J36 450
PREOUT assembly
(AWZ4386)
(➡ SCH-2)
CN 38
CN 36
TRANS TERMINAL
assembly
(AWZ4268)
(➡ SCH-8)
FU 3
AEK-512
FU 5
AEK-509
FU 4
AEK-512
FU 6
AEK-509
(T2.5A 250V)
(T1.25A 250V)
C12
C11
C10
C10-12 : 0.1/250
T1
POWER TRANSFORMER
ATS1435
SCH-1
HB ONLY
240V
COM
230V
HEZ/HL
BIND
HB ONLY
CONNECTION assembly
(AWZ4385)
(➡ SCH-7)
CN 55
CN 54
CN 15
CN 52
CN 53
AKT1026
AKT1021
CN 14
DSP assembly
(AWZ4294)
(➡ SCH-5)
J13 150
J17 600
J22 250
J29 300
J25 150
J11 200
AUDIO FUNCTION
assembly
(AWZ5001)
(➡ SCH-2)
CN 11
AKT1011
AKT1024
J12 150
J40 100
A/V FUNCTION
assembly
(AWZ5002)
(➡ SCH-3)
CN 8
AKT1021
AKT1009
AKT1011
AKT1024
SC
AKC1016
J37 100
S TERM
assembly
(AWQ1017)
(➡ SCH-4)
CN 952
CN 951
POWER SUPPLY assembly
(AWZ4999 : HEZ)
(AWZ5052 : HB/HL)
(➡ SCH-8)
CN 17
AKT1025
AKT1009
FU 1
AEK-512
(T2.5A,250V)
TP57(HOT)
TP56(COM)
Y22(C)
Y21(BL)
COM (BL)
HOT (BR)
AC POWER CORD
ADG1049 : HEZ, HL
ADG1118 : HB
AC220-230V/240V
50/60Hz
J14 200
CN 24
CN 23
J24 200
J23 200
REG (5.6V) assembly
(AWZ4267)
(➡ SCH-7)
REG (12V) assembly
(AWZ4266)
(➡ SCH-7)

Note: Type 1

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   V : Signal voltage at rated output.
   : DC voltage (V) at no input signal unless otherwise noted. Value in ( ) is DC voltage at rated power.
   ⇦ mA or ← mA : DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ➡ : Signal route.
   - ⊘ : Adjusting point.
   - ▼ : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SWITCHES** (Underline indicates switch position):

S3 CENTER SP SW SINGLE – DUAL

FL. U-COM assembly

S601	SIMULATED STEREO
S603	POWER
S605	THEATER
S609	PROLOGIC THEATER
S614	VCR 1
S617	BASS –
S618	VCR 2
S621	TREBLE –
S622	LD
S625	DOLBY PROLOGIC
S626	TV
S629	BALANCE L
S630	VIDEO
S634	TAPE 1/DAT
S637	BASS +
S638	TAPE 2/MONITOR
S641	DOLBY 3CH LOGIC
S642	CD
S644	SIMULATED SURROUND
S645	TREBLE +
S646	TUNER
S648	JAZZ
S649	BALANCE R
S650	PHONO
S652	CHURCH
S654	ACOUSTIC SELECT
S656	DANCE
S657	MUTING –∞
S658	ACOUSTIC MEMORY
S659	RESET
S660	HALL

SP SW assembly

S251	SP–A ON/OFF SP–B ON/OFF

9. **For SCH–□ on the schematic diagram**
   - SCH–□ indicates the drawing number of the schematic diagram.
     (SCH stands for schematic diagram.)

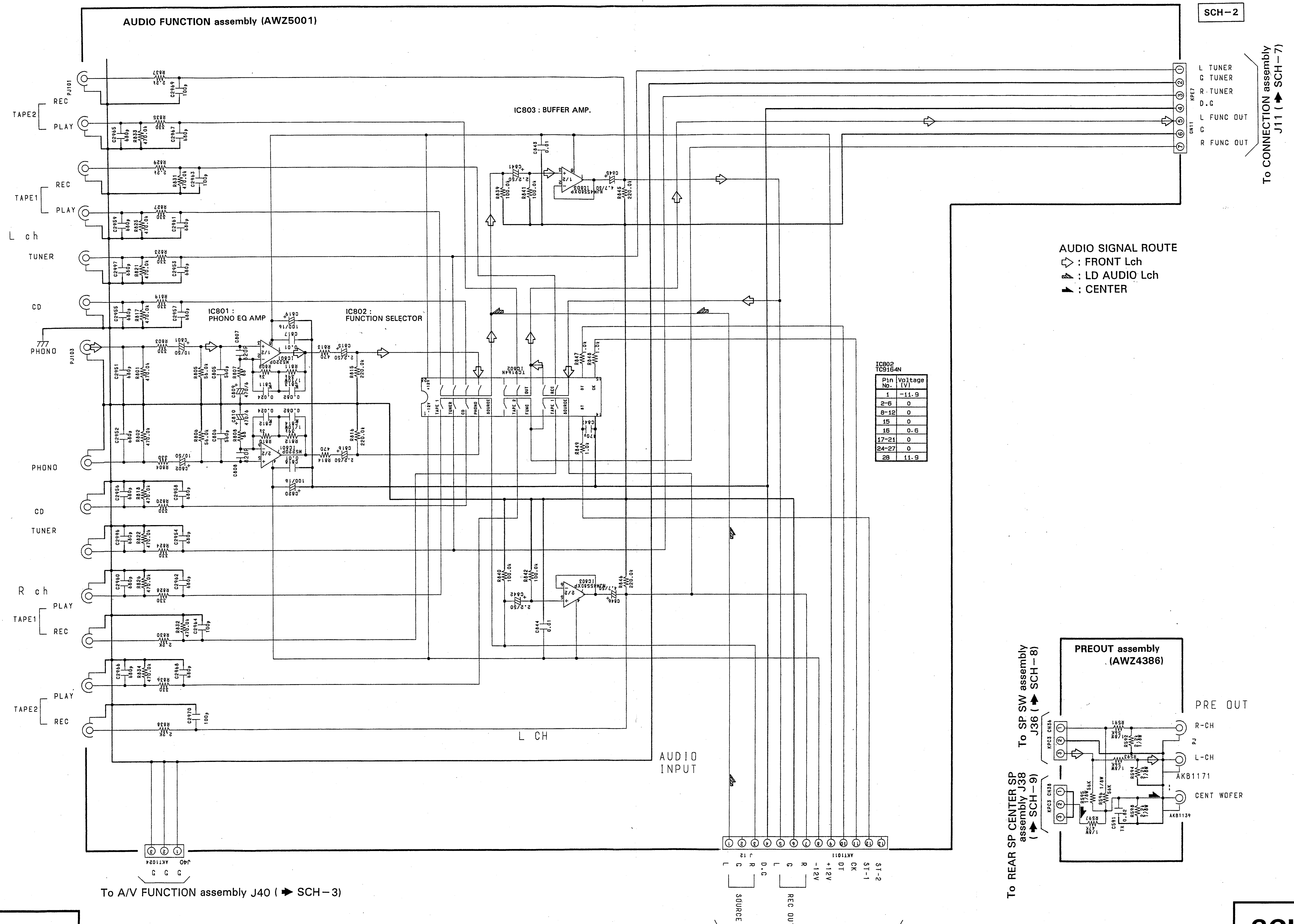
SCH–1

OVERALL SCHEMATIC DIAGRAM

OVERALL SCHEMATIC DIAGRAM

SCH–1

4.2 AUDIO FUNCTION ASSEMBLY AND PREOUT ASSEMBLY


SCH-2
AUDIO FUNCTION assembly (AWZ5001)
PJ101
TAPE2 REC
TAPE2 PLAY
TAPE1 REC
TAPE1 PLAY
L ch
TUNER
CD
PHONO
PJ103
R ch
IC801 : PHONO EQ AMP
IC802 : FUNCTION SELECTOR
IC803 : BUFFER AMP.
TC9164N
NJM4558DXP
NE5532P
L CH
AUDIO INPUT
L TUNER
G TUNER
R TUNER
D.G
L FUNC OUT
G
R FUNC OUT
CN11
To CONNECTION assembly J11 (➡ SCH-7)
AUDIO SIGNAL ROUTE
⇨ : FRONT Lch
: LD AUDIO Lch
: CENTER
J40
AKT1024
G G G
To A/V FUNCTION assembly J40 (➡ SCH-3)
J12
AKT1011
L G R D.G L G R -12V +12V DT CK ST-1 ST-2
SOURCE
REC OUT
To A/V FUNCTION assembly J12 (➡ SCH-3)
PREOUT assembly (AWZ4386)
PRE OUT
R-CH
L-CH
CENT WOFER
AKB1171
AKB1139
To SP SW assembly J36 (➡ SCH-8)
To REAR SP CENTER SP assembly J38 (➡ SCH-9)
KPC3 CN36
KPC3 CN38

IC802
TC9164N

Pin No.	Voltage (V)
1	-11.9
2-6	0
8-12	0
15	0
16	0.6
17-21	0
24-27	0
28	11.9

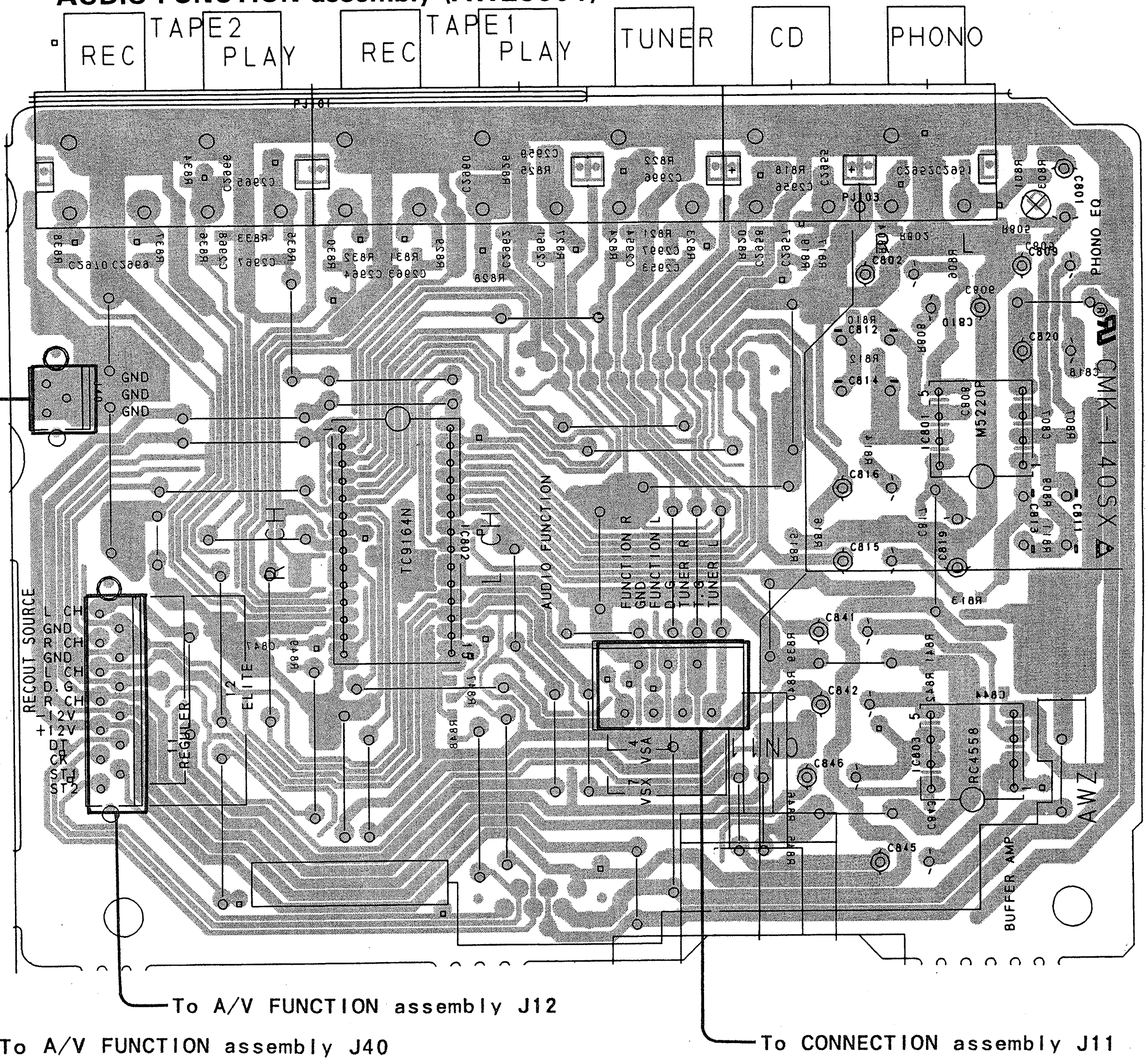
SCH-2

AUDIO FUNCTION assembly,
PREOUT assembly

AUDIO FUNCTION assembly,
PREOUT assembly

SCH-2

AUDIO FUNCTION assembly (AWZ5001)


TAPE2
REC
PLAY
TAPE1
REC
PLAY
TUNER
CD
PHONO
PJ101
PJ103
PHONO EQ
CMK-140SX
IC801
M5220P
GND
GND
GND
RECOUT SOURCE
L CH
GND
R CH
GND
L CH
D.G
R CH
-12V
+12V
DT
CR
ST1
ST2
REGULER
ELITE
R CH
L CH
TC9164N
IC802
AUDIO FUNCTION
FUNCTION R
GND
FUNCTION L
D.G
TUNER R
T.G
TUNER L
VSX VSA
CN11
IC803
RC4558
BUFFER AMP
AWZ
C802
C812
C814
C816
C815
C819
C820
C841
C842
C846
C845
To A/V FUNCTION assembly J12
To A/V FUNCTION assembly J40
To CONNECTION assembly J11

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

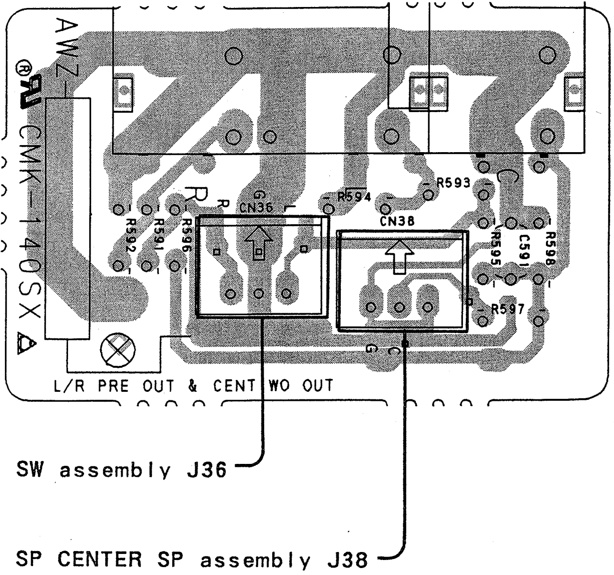
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarized)
C518		Capacitor (Non-polarized)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

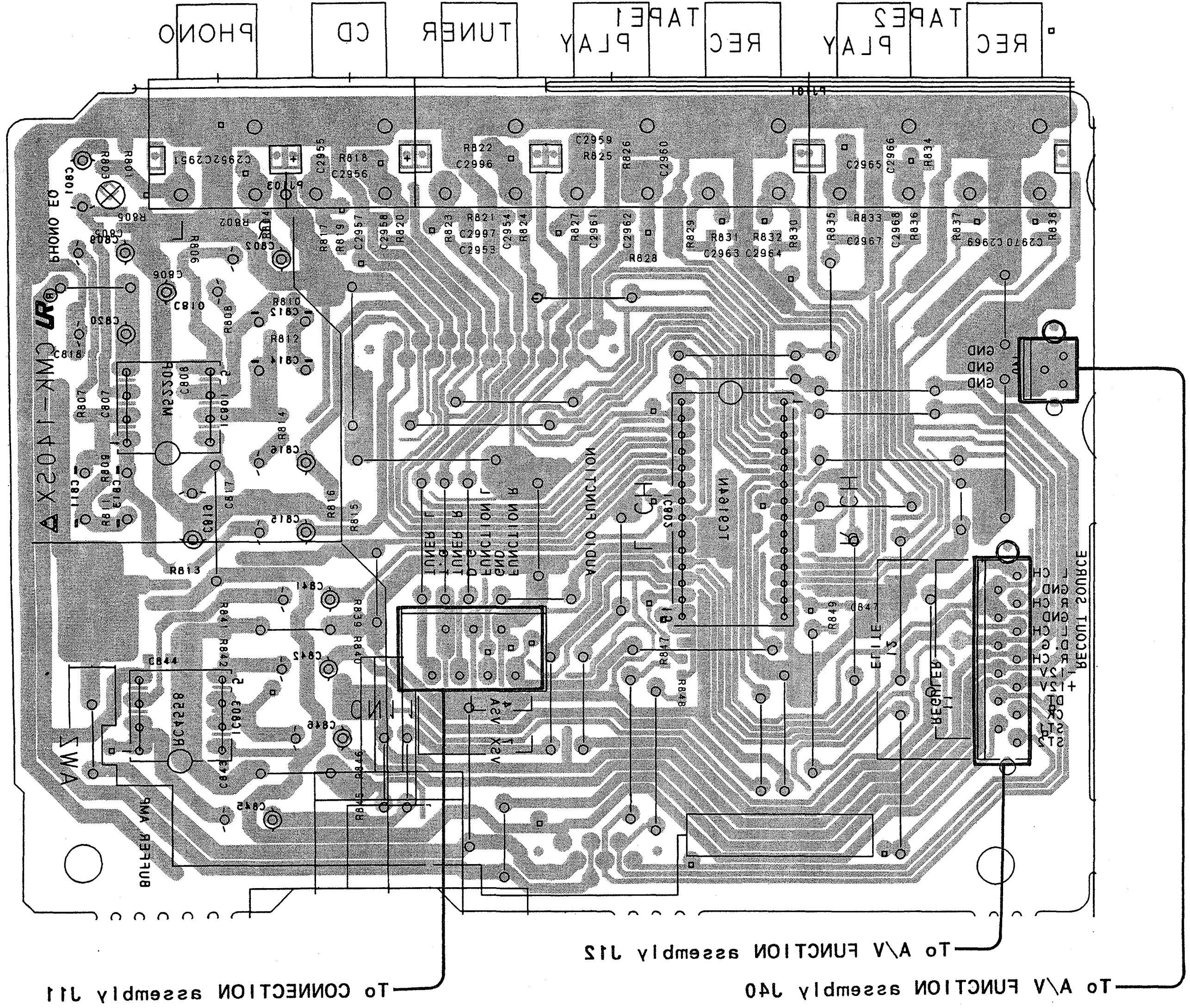
3. The capacitor terminal marked with ◎ (double circles) shows negatine terminal.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

PREOUT assembly

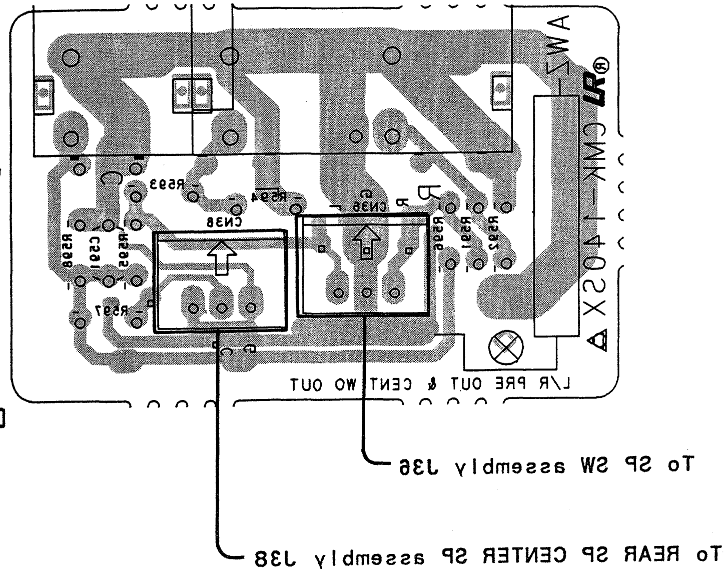

AWZ-
CMK-140SX
R
L
CN36
G
CN38
R594
R593
R592
R591
R596
R595
C591
R598
R597
L/R PRE OUT & CENT WO OUT
To SP SW assembly J36
To REAR SP CENTER SP assembly J38

This PCB connection diagram is viewed from the parts mounted side.

AUDIO FUNCTION assembly (AWZ5001)

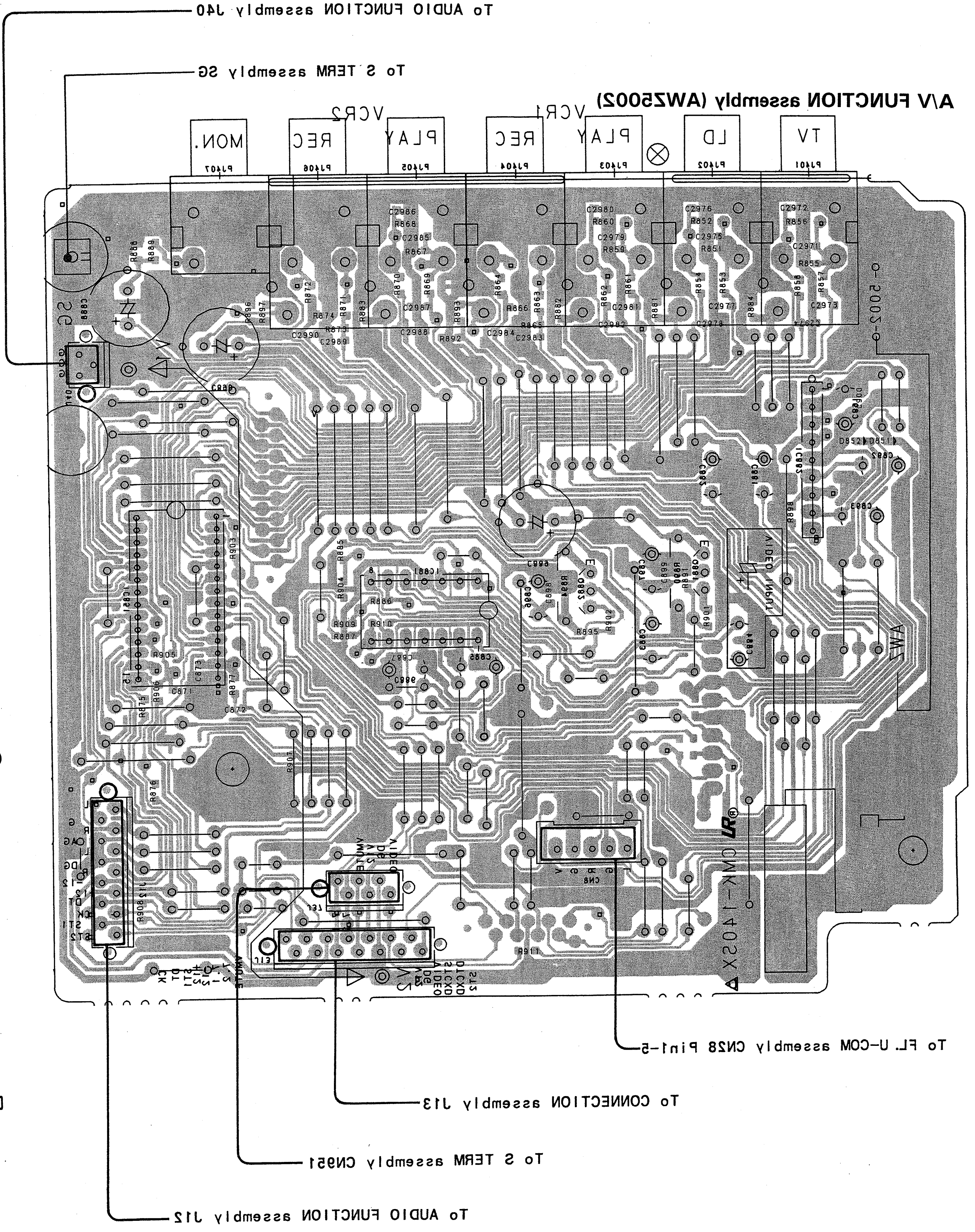

PHONO
CD
TUNER
TAPE1
PLAY
REC
TAPE2
PLAY
REC
PHONO EQ
BUFFER AMP
AUDIO FUNCTION
L CH
R CH
RECOUT SOURCE
GND
GND
GND
AXS041-CMK-1405X
To A/V FUNCTION assembly J12
To A/V FUNCTION assembly J40
To CONNECTION assembly J11

PREOUT assembly


AXS041-CMK-1405X
CN36
CN38
L/R PRE OUT & CENT WO OUT
To SP SW assembly J36
To REAR SP CENTER SP assembly J38

This PCB connection diagram is viewed from the foil side.

4.3 A/V FUNCTION ASSEMBLY


To AUDIO FUNCTION assembly J40
To S TERM assembly SG
A/V FUNCTION assembly (AWZ5002)
VCR2
VCR1
MON.
REC
PLAY
LD
TV
P1407
P1406
P1405
P1404
P1403
P1402
P1401
SG
IC881
IC882
IC883
CN8
J13
J12
VIDEO INPUT
AWZ
To FL U-COM assembly CN28 Pin1-5
To CONNECTION assembly J13
To S TERM assembly CN951
To AUDIO FUNCTION assembly J12

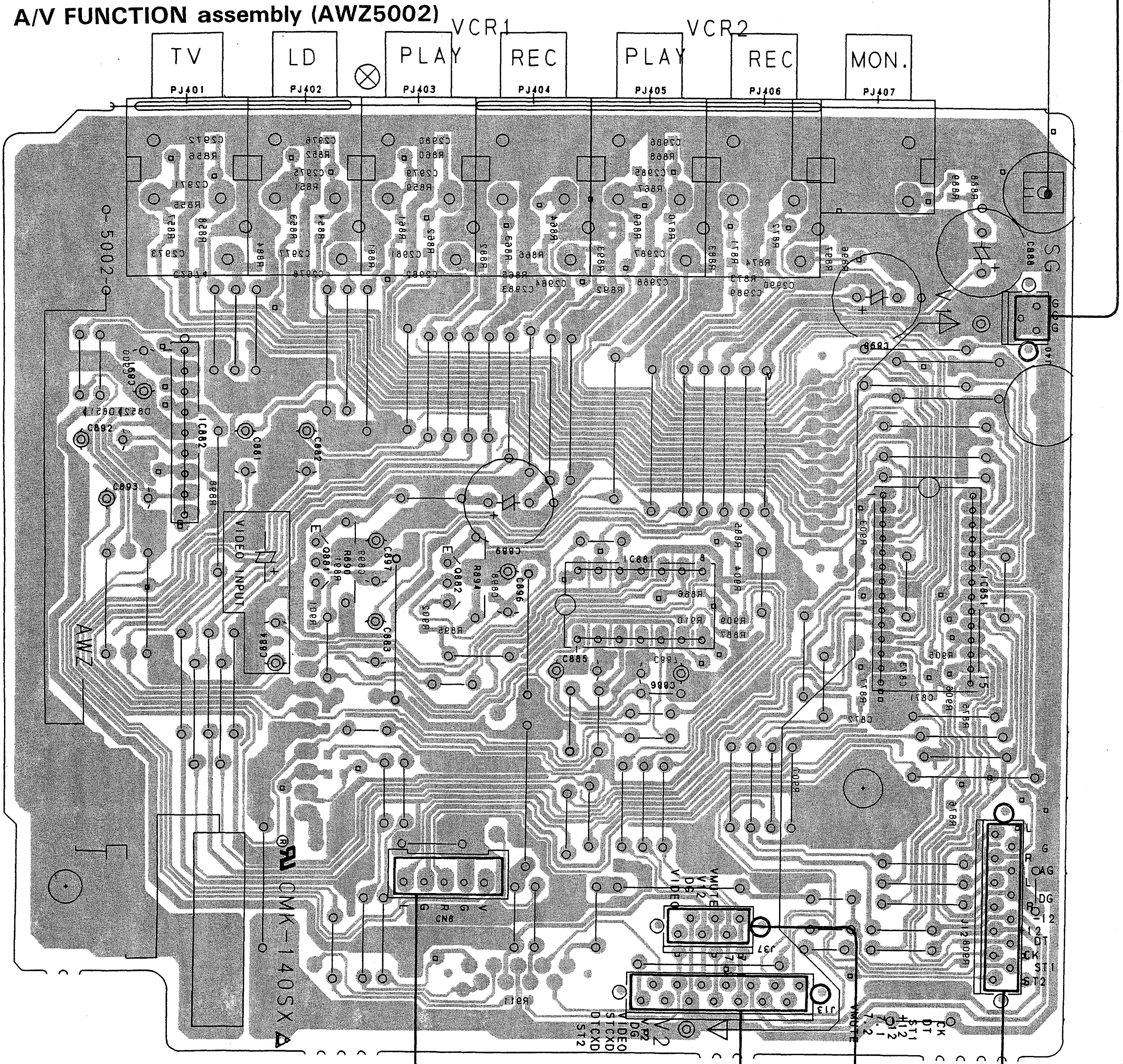
This PCB connection diagram is viewed from the foil side.

4.3 A/V FUNCTION ASSEMBLY

To AUDIO FUNCTION assembly J40

To S TERM assembly SG

A/V FUNCTION assembly (AWZ5002)


VCR1
VCR2
TV
LD
PLAY
REC
PLAY
REC
MON.
PJ401
PJ402
PJ403
PJ404
PJ405
PJ406
PJ407
SG
5002
VIDEO INPUT
AWZ
IC882
IC881
IC851
CMK-140SX
CN8
J37
J13
J12
VMUTE
V12
DG
VIDEO
STCXD
DTCXD
ST2
L
G
R
AG
DG
-12
+12
DT
CK
ST1
ST2

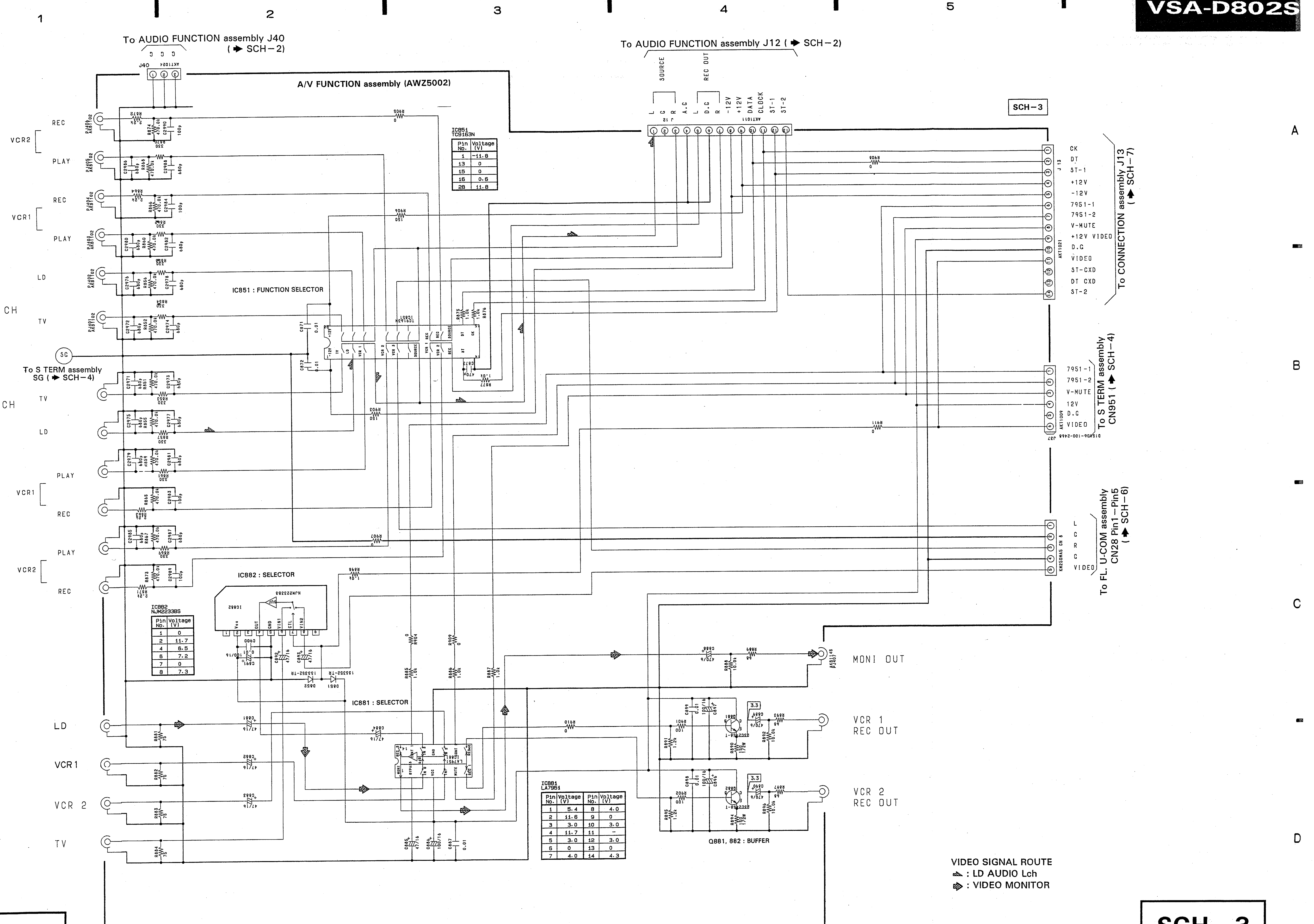
To FL. U-COM assembly CN28 Pin1-5

To CONNECTION assembly J13

To S TERM assembly CN951

To AUDIO FUNCTION assembly J12

This PCB connection diagram is viewed from the parts mounted side.


1
2
3
4
5
A
B
C
D
To AUDIO FUNCTION assembly J40 (➜ SCH−2)
J40
A/V FUNCTION assembly (AWZ5002)
To AUDIO FUNCTION assembly J12 (➜ SCH−2)
SOURCE
REC OUT
L
G
R
A.G
L
D.G
R
−12V
+12V
DATA
CLOCK
ST−1
ST−2
J12
AKT1011
SCH−3
CK
DT
ST−1
+12V
−12V
7951−1
7951−2
V−MUTE
+12V VIDEO
D.G
VIDEO
ST−CXD
DT CXD
ST−2
J13
AKT1021
To CONNECTION assembly J13 (➜ SCH−7)
7951−1
7951−2
V−MUTE
12V
D.G
VIDEO
AKT1009
J37
To S TERM assembly CN951 (➜ SCH−4)
L
G
R
G
VIDEO
CN8
To FL. U-COM assembly CN28 Pin1−Pin5 (➜ SCH−6)
REC
VCR2
PLAY
REC
VCR1
PLAY
LD
CH
TV
SG
To S TERM assembly SG (➜ SCH−4)
CH
TV
LD
PLAY
VCR1
REC
PLAY
VCR2
REC
IC851 : FUNCTION SELECTOR
IC851
TC9163N
IC882 : SELECTOR
IC882
NJM2233BS
IC881 : SELECTOR
LA7951
LD
VCR1
VCR 2
TV
MONI OUT
VCR 1 REC OUT
VCR 2 REC OUT
Q881, 882 : BUFFER
3.3
3.3

IC851
TC9163N

Pin No.	Voltage (V)
1	−11.8
13	0
15	0
16	0.6
28	11.8

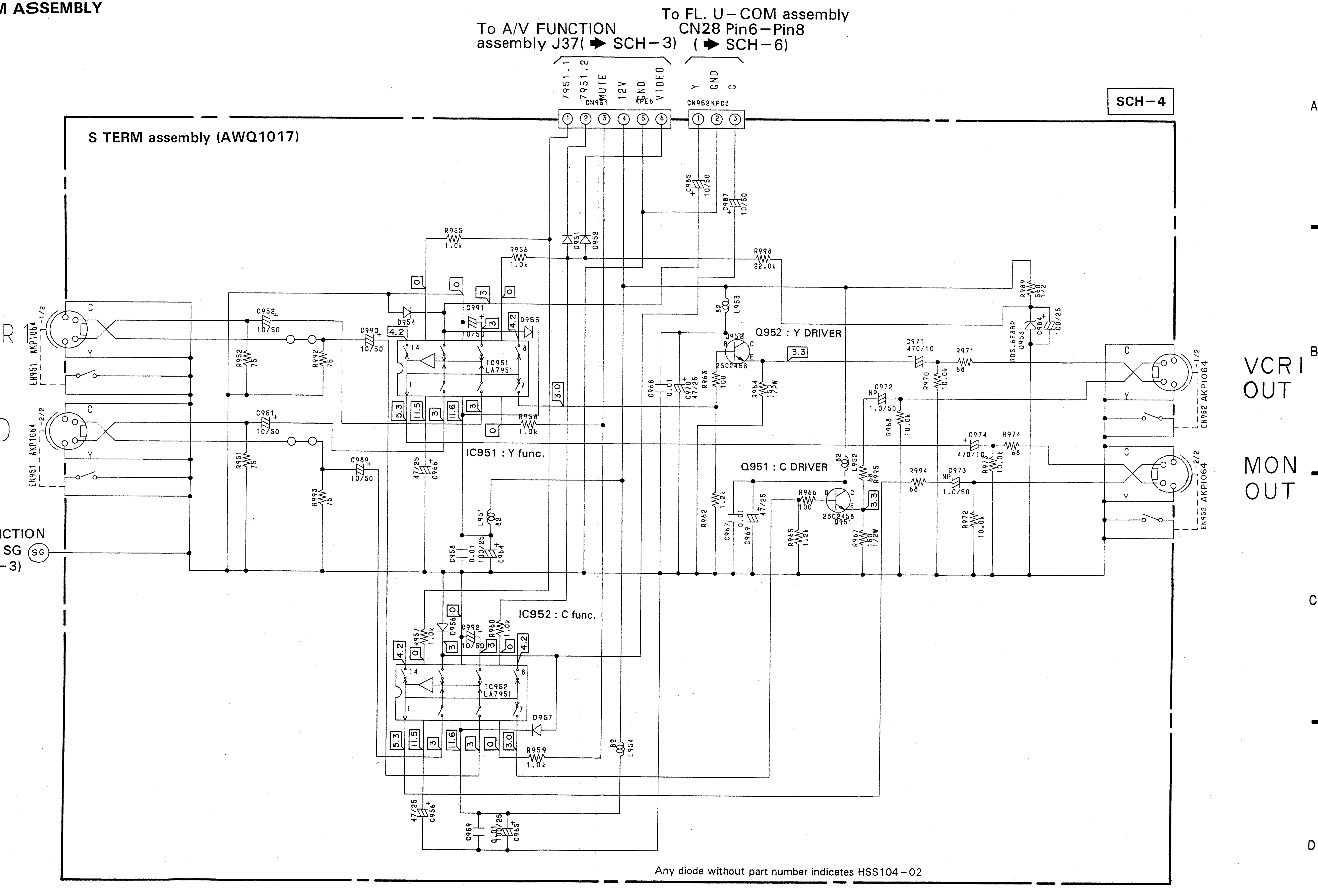
IC882
NJM2233BS

Pin No.	Voltage (V)
1	0
2	11.7
4	6.5
6	7.2
7	0
8	7.3

IC881
LA7951

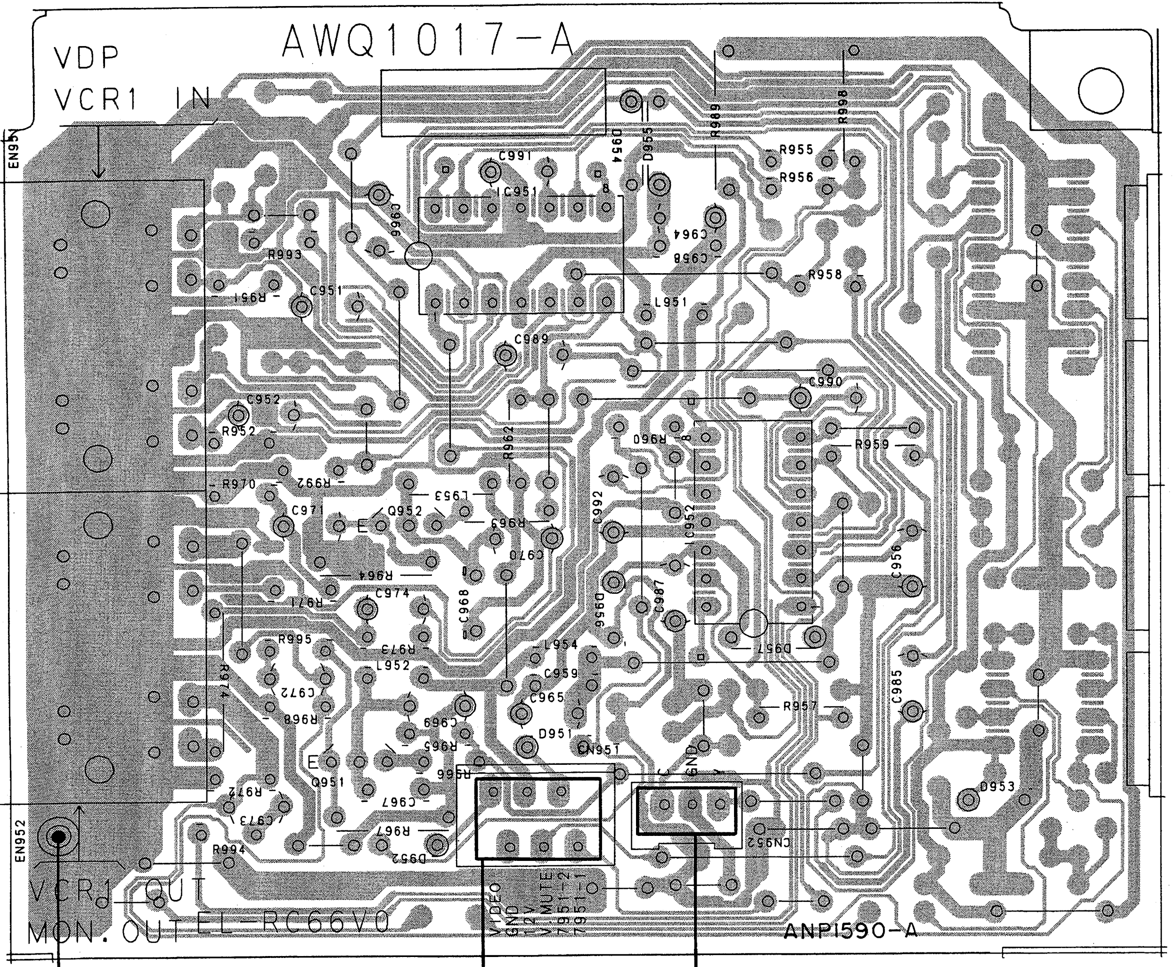
Pin No.	Voltage (V)	Pin No.	Voltage (V)
1	5.4	8	4.0
2	11.6	9	0
3	3.0	10	3.0
4	11.7	11	−
5	3.0	12	3.0
6	0	13	0
7	4.0	14	4.3

VIDEO SIGNAL ROUTE
▨ : LD AUDIO Lch
▨ : VIDEO MONITOR


To A/V FUNCTION
assembly J37(➡ SCH−3)
To FL. U−COM assembly
CN28 Pin6−Pin8
(➡ SCH−6)
7951.1
7951.2
MUTE
12V
GND
VIDEO
CN951
KPE6
Y
GND
C
CN952KPC3
SCH−4
S TERM assembly (AWQ1017)
C985 10/50
C987 10/50
R955 1.0k
R956 1.0k
D951
D952
R998 22.0k
R989 560 1/2
D954
C991 10/50
D955
C952 10/50
C990 10/50
R952 75
R992 75
IC951 LA7951
L953 82
Q952 : Y DRIVER
2SC2458
C968 0.01
C970 47/25
R963 100
R964 150 1/2W
C971 470/10
R971 68
R970 10.0k
RD5.6ESB2 D953
C984 100/25
C972 NP 1.0/50
R968 10.0k
C974 470/10
R974 68
R973 10.0k
EN951 AKP1064 −1/2
EN951 AKP1064 −2/2
C951 10/50
R951 75
R993 75
C989 10/50
C966 47/25
R958 1.0k
IC951 : Y func.
L951 82
C958 0.01
C964 100/25
Q951 : C DRIVER
L952 82
R995 68
R994 68
C973 NP 1.0/50
R972 10.0k
R962 1.2k
C967 0.01
C969 47/25
R966 100
R965 1.2k
2SC2458 Q951
R967 150 1/2W
EN952 AKP1064 −1/2
EN952 AKP1064 −2/2
VCR1 OUT
MON OUT
ICTION
SG
−3)
IC952 : C func.
R957 1.0k
D956
C992 10/50
R960 1.0k
IC952 LA7951
D957
R959 1.0k
L954 82
C956 47/25
C959 0.01
C965 100/25
4.2
5.3
11.5
11.6
3.0
3.3
0
3
A
B
C
D

Any diode without part number indicates HSS104−02

S TERM assembly (AWQ1017)


VDP
VCR1 IN
AWQ1017−A
EN951
EN952
VCR1 OUT
MON. OUT
EL-RC66V0
ANP1590−A
VIDEO
GND
12V
V.MUTE
7951-2
7951-1
GND
IC951
IC952
Q951
Q952
CN951
CN952
L951
L952
L953
L954
D951
D952
D953
D954
D955
D956
D957
D966
C951
C952
C956
C958
C959
C964
C965
C967
C968
C969
C970
C971
C972
C973
C974
C985
C987
C989
C990
C991
C992
R951
R952
R955
R956
R957
R958
R959
R960
R962
R963
R964
R965
R966
R967
R968
R970
R971
R972
R973
R974
R989
R992
R993
R994
R995
R998
E

To FL. U-COM assembly CN28 Pin6-8

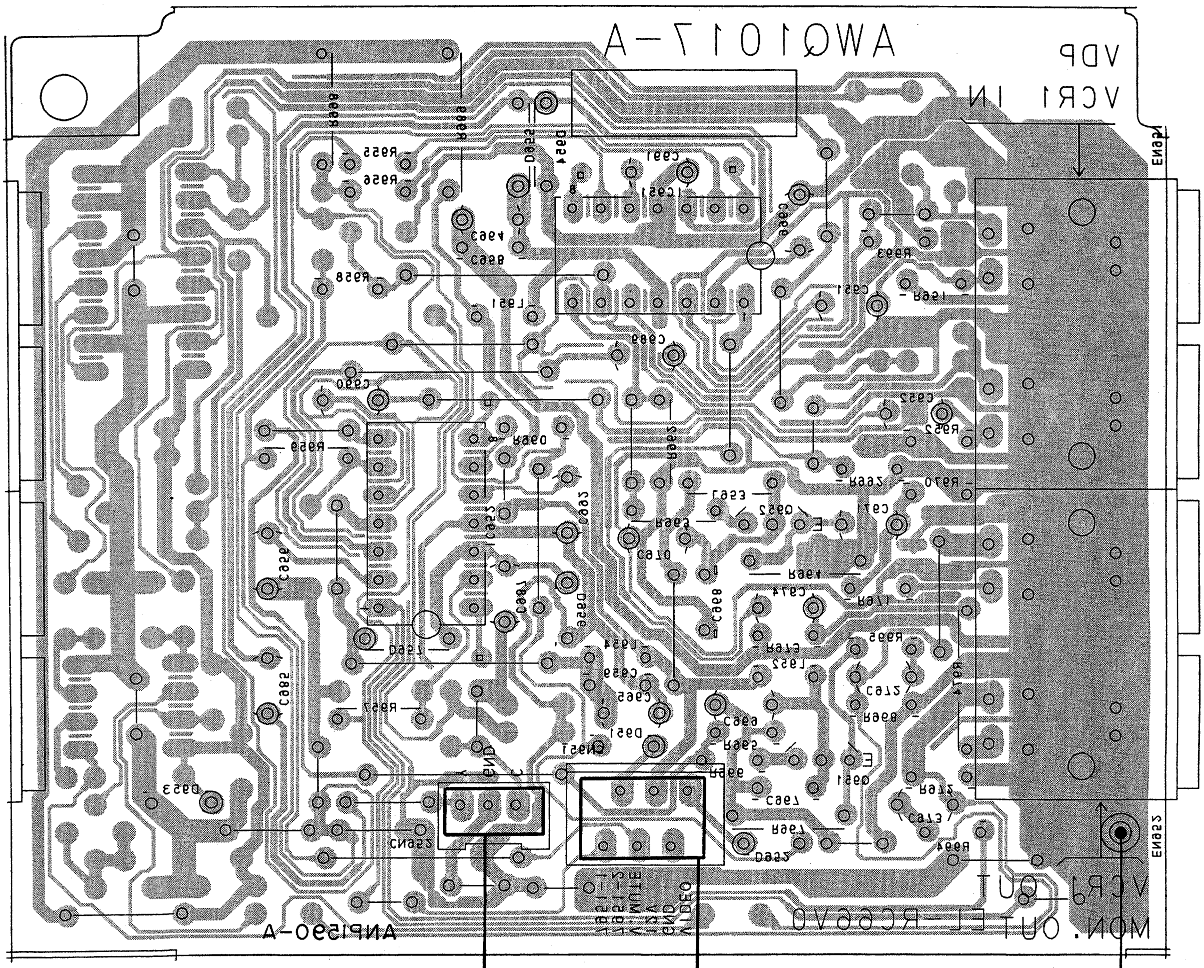
To A/V FUNCTION assembly J37

To A/V FUNCTION assembly SG

This PCB connection diagram is viewed from the parts mounted side.

A A

S TERM assembly (AWQ1017)


AWQ1017-A
VDP
VCR1 IN
VCR1 OUT
MON. OUT
EL-RC66V0
ANP1590-A
CN951
CN952
CN953
IC951
IC952
Q951
Q952
D951
D953
D954
D956
D962
L951
L952
L954
L960
R955
R956
R958
R959
R960
R966
R968
R970
R971
R973
R995
C951
C952
C953
C959
C960
C963
C965
C968
C969
C970
C971
C974
C990
C991
GND
V-MUTE
VIDEO

B B

C C

To FL U-COM assembly CN28 Pin6-8

To A/V FUNCTION assembly J37

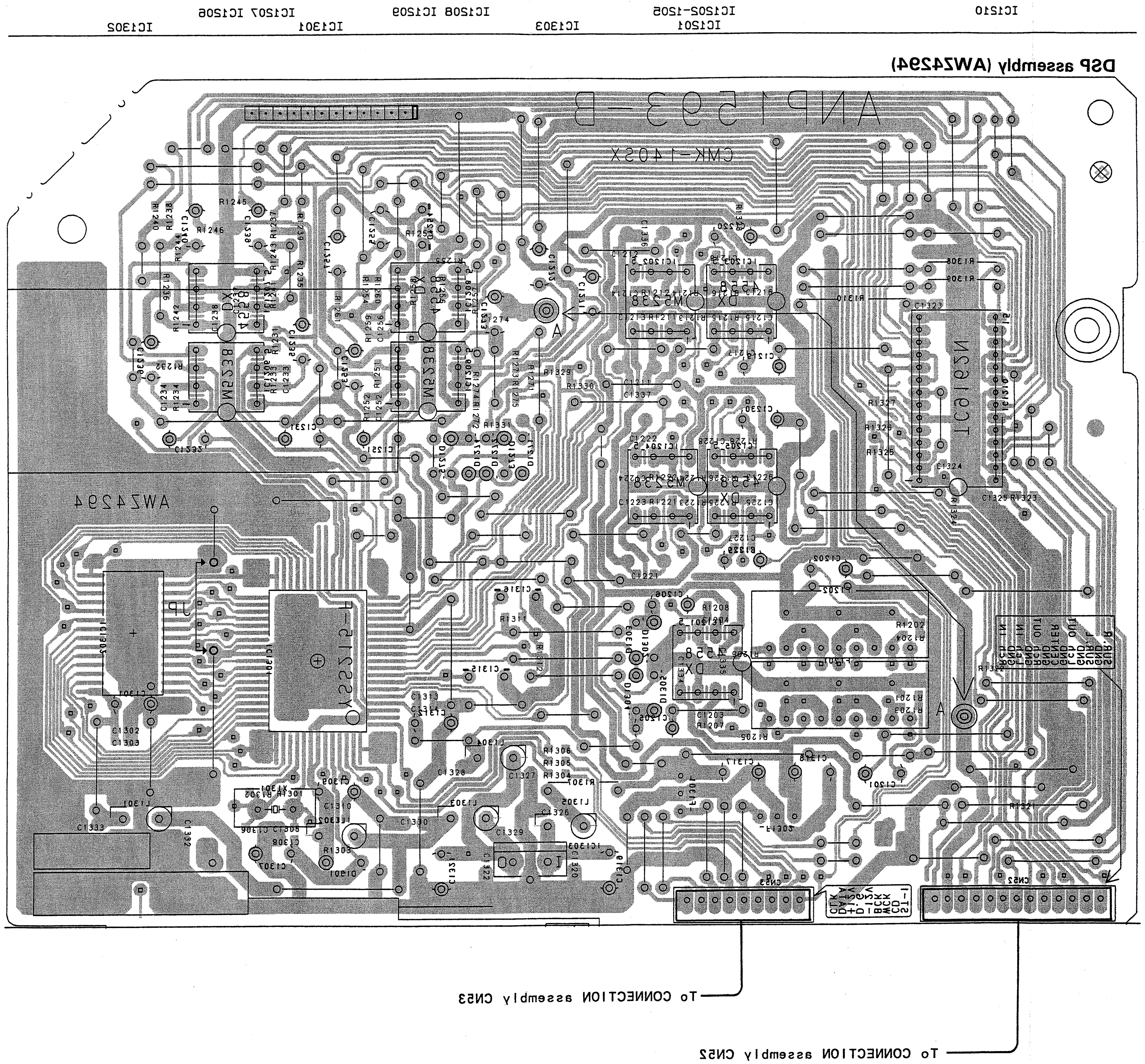
To A/V FUNCTION assembly SG

D D

This PCB connection diagram is viewed from the foil side.

4.5 DSP ASSEMBLY

This PCB connection diagram is viewed from the foil side.

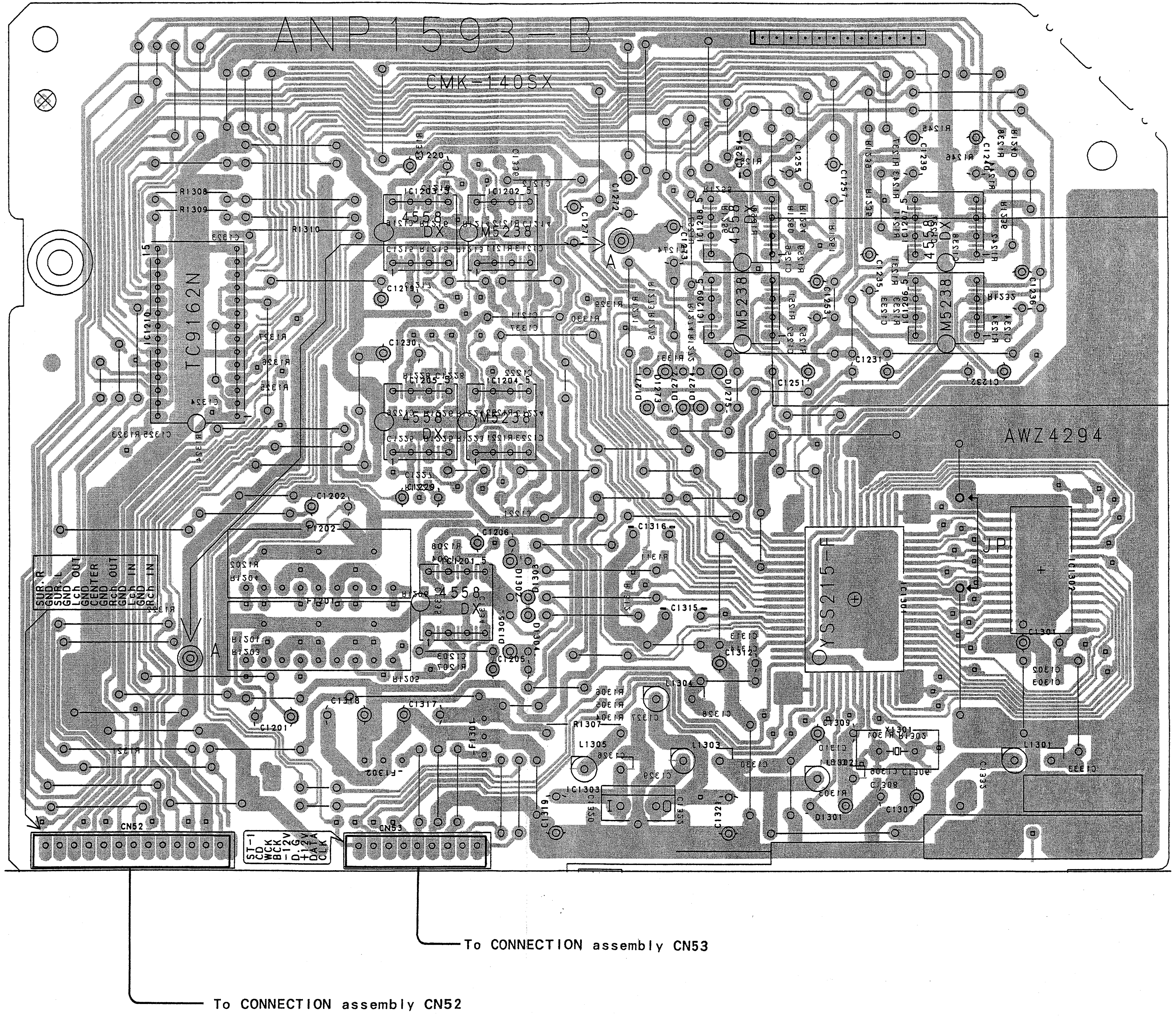

IC1210
IC1202–1205
IC1201
IC1208 IC1209
IC1303
IC1207 IC1206
IC1301
IC1302
DSP assembly (AWZ4294)
ANP1593-B
CMK-1405X
AWZ4294
IC1210
IC1301
IC1305
JP
A
CN53
CN52
To CONNECTION assembly CN53
To CONNECTION assembly CN52

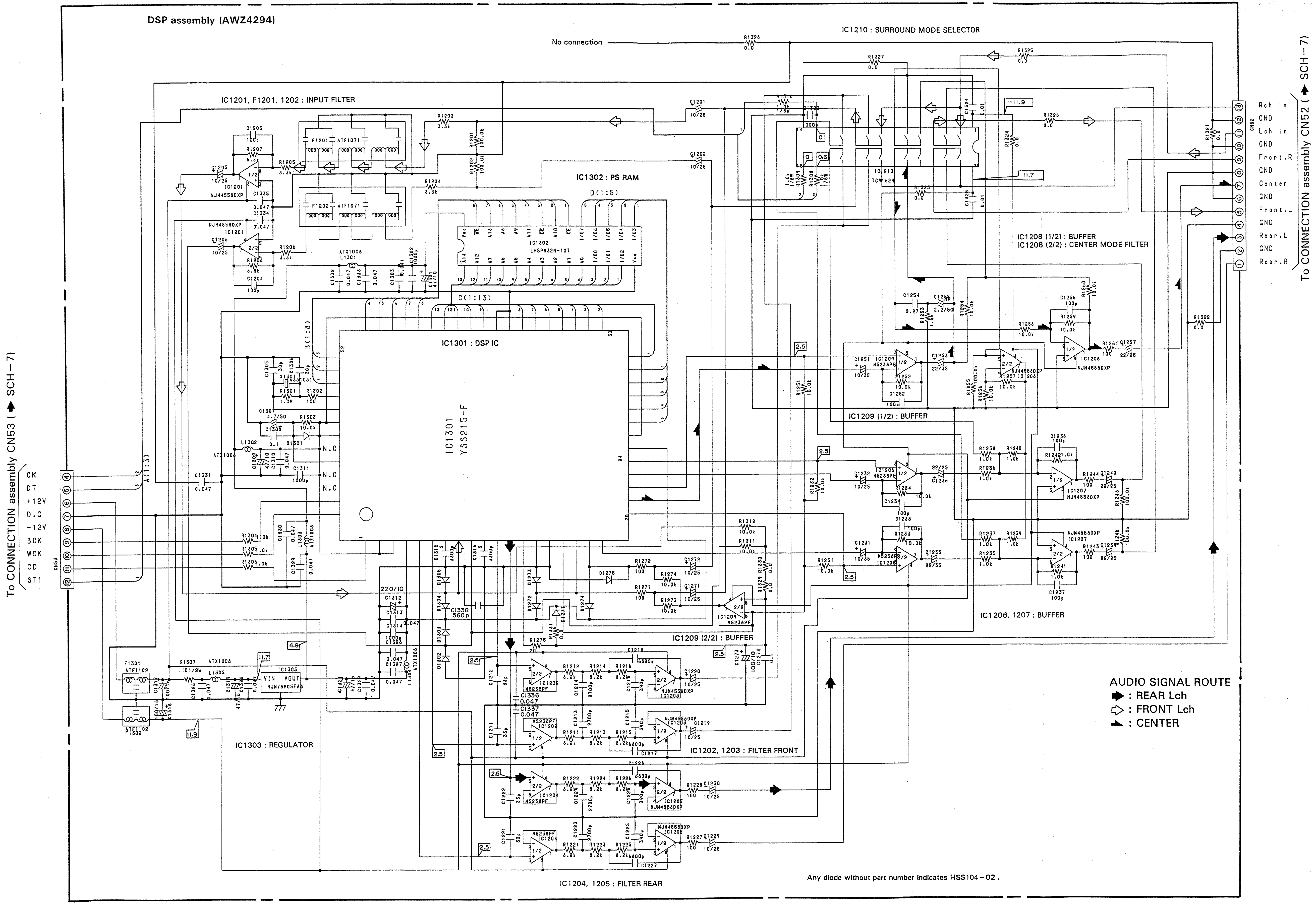
4.5 DSP ASSEMBLY

This PCB connection diagram is viewed from the parts mounted side.

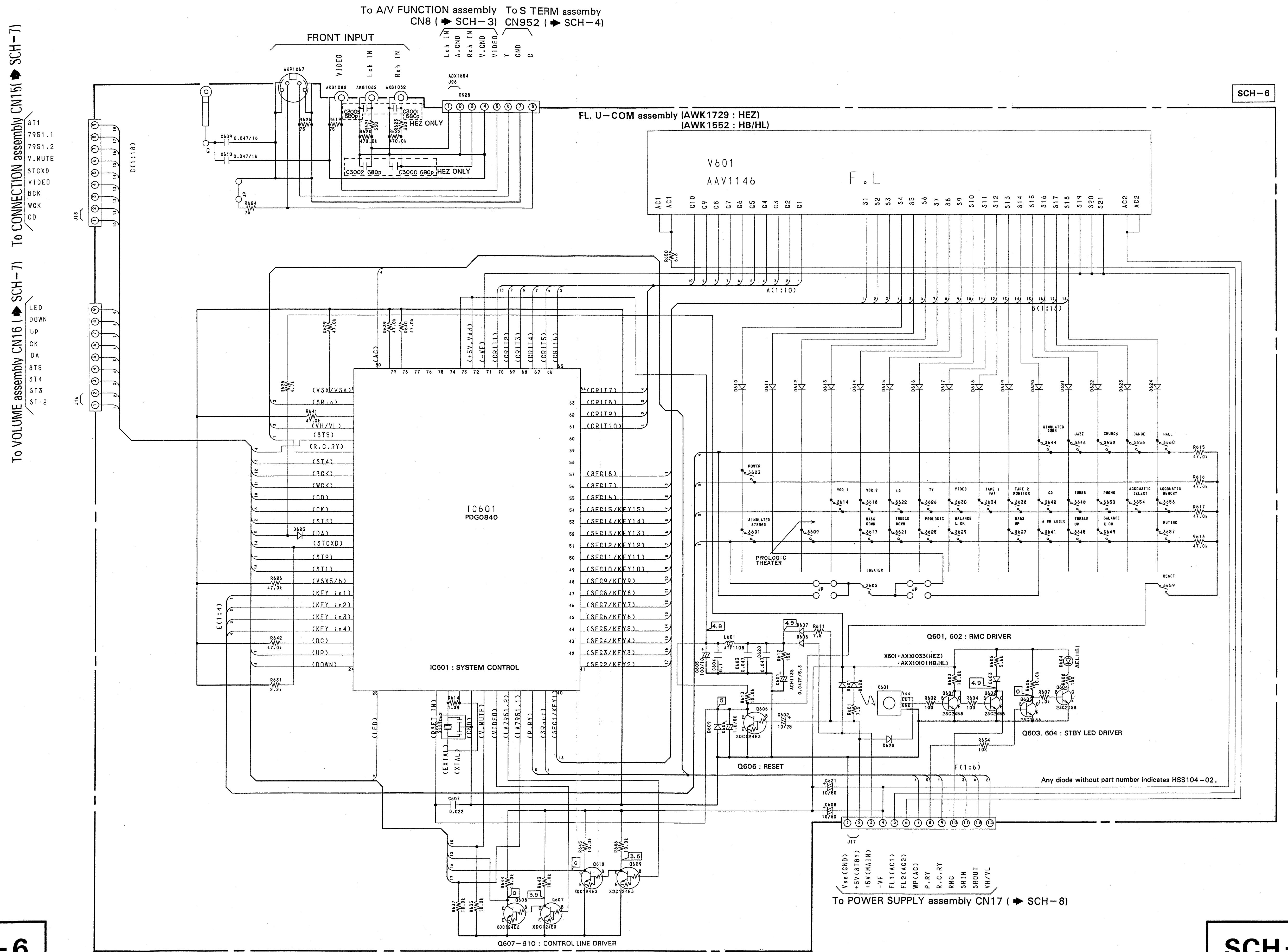
IC1210 IC1202–1205 IC1201 IC1303 IC1208 IC1209 IC1301 IC1207 IC1206 IC1302

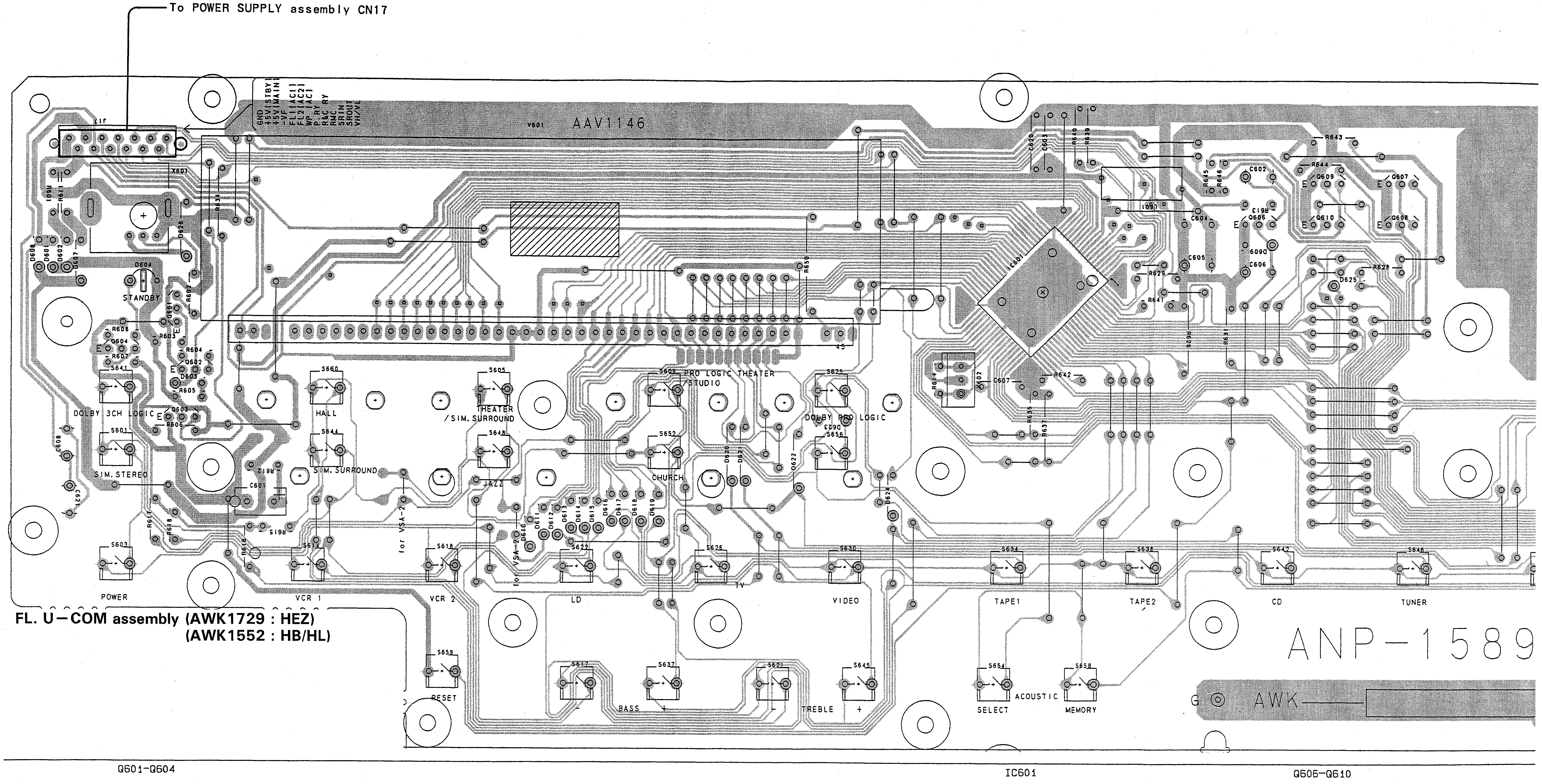
DSP assembly (AWZ4294)


ANP1593-B
CMK-140SX
AWZ4294
TC9162N
IC1210
4558 DX
M5238
YSS215-F
IC1301
JP
A
SUR.R
GND
SUR.L
GND
Lch OUT
GND
CENTER
GND
Rch OUT
GND
Lch IN
GND
Rch IN
CN52
ST-1
CD
WCK
BCK
-12V
D.G
+12V
DATA
CLK
CN53
To CONNECTION assembly CN53
To CONNECTION assembly CN52


DSP assembly (AWZ4294)
No connection
IC1210 : SURROUND MODE SELECTOR
IC1201, F1201, 1202 : INPUT FILTER
IC1302 : PS RAM
LH5P832N-10T
D(1:5)
C(1:13)
B(1:8)
A(1:3)
IC1301 : DSP IC
IC1301
YSS215-F
F1201 ATF1071
F1202 ATF1071
NJM4558DXP
ATX1008
TC9162N
IC1208 (1/2) : BUFFER
IC1208 (2/2) : CENTER MODE FILTER
IC1209 (1/2) : BUFFER
IC1209 (2/2) : BUFFER
IC1206, 1207 : BUFFER
IC1202, 1203 : FILTER FRONT
IC1204, 1205 : FILTER REAR
IC1303 : REGULATOR
NJM78M05FA
VIN VOUT
F1301 ATF1102
F1302 ATF1102
NJM4558DXP
NJM4558DXP
N.C
N.C
N.C
CN53
CK
DT
+12V
D.G
-12V
BCK
WCK
CD
ST1
To CONNECTION assembly CN53 (➔ SCH-7)
CN52
Rch in
GND
Lch in
GND
Front.R
GND
Center
GND
Front.L
GND
Rear.L
GND
Rear.R
To CONNECTION assembly CN52 (➔ SCH-7)
AUDIO SIGNAL ROUTE
➡ : REAR Lch
⇨ : FRONT Lch
◢ : CENTER
Any diode without part number indicates HSS104-02 .

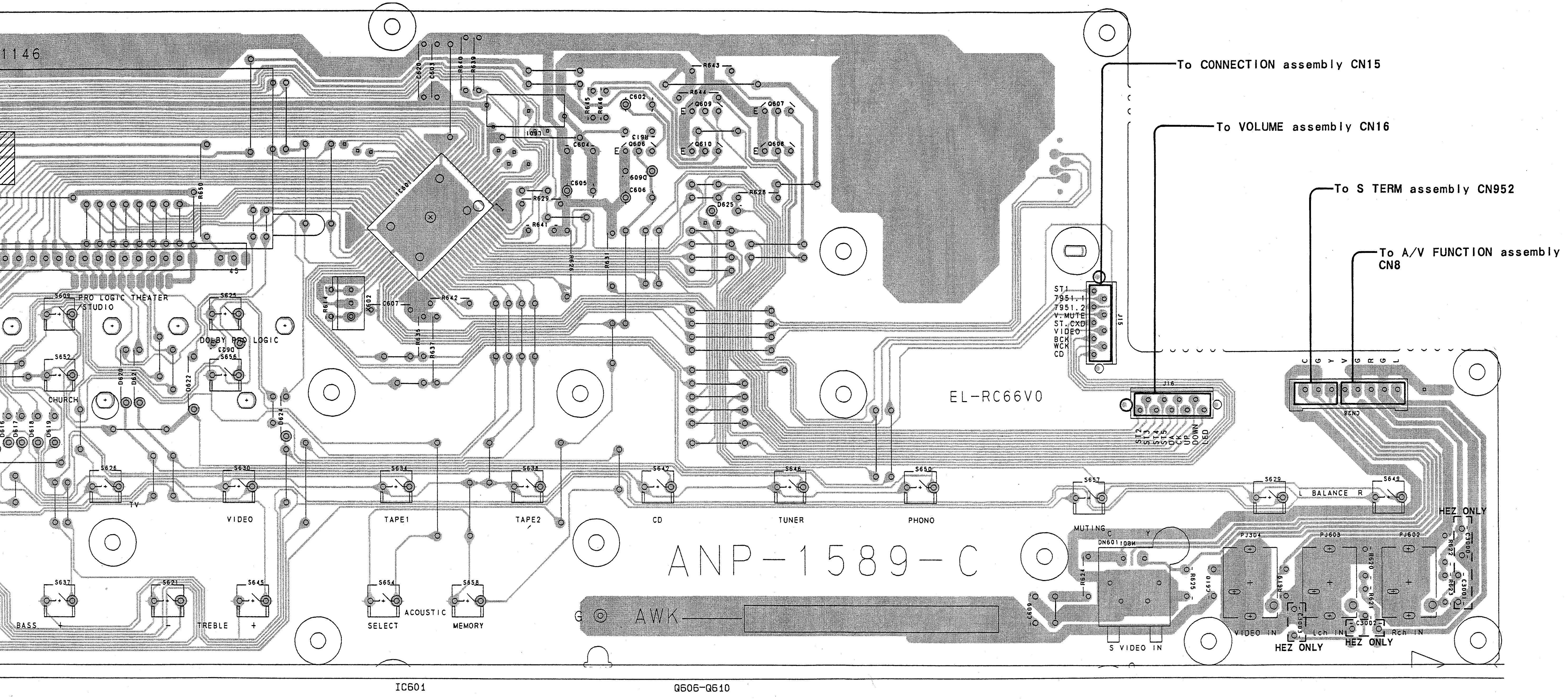
4.6 FL. U-COM ASSEMBLY


A
B
C
D
To A/V FUNCTION assembly CN8 (➡ SCH−3)
To S TERM assembly CN952 (➡ SCH−4)
FRONT INPUT
VIDEO
Lch IN
Rch IN
Lch IN
A.GND
Rch IN
V.GND
VIDEO
Y
GND
C
AKP1067
AKB1082
ADX1654
J28
CN28
C3003 680p
C3001 680p
HEZ ONLY
C3002 680p
C3000 680p
HEZ ONLY
C609 0.047/16
C610 0.047/16
R624 75
JP
SCH−6
FL. U−COM assembly (AWK1729 : HEZ)
(AWK1552 : HB/HL)
V601
AAV1146
F.L
AC1
C10
C9
C8
C7
C6
C5
C4
C3
C2
C1
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
AC2
A(1:10)
B(1:18)
C(1:18)
To CONNECTION assembly CN15 (➡ SCH−7)
ST1
7951.1
7951.2
V.MUTE
STCXD
VIDEO
BCK
WCK
CD
J15
To VOLUME assembly CN16 (➡ SCH−7)
LED
DOWN
UP
CK
DA
ST5
ST4
ST3
ST−2
J16
IC601
PDG084D
IC601 : SYSTEM CONTROL
(VSX/VSA)
(SRin)
(VH/VL)
(ST5)
(R.C.RY)
(ST4)
(BCK)
(WCK)
(CD)
(CK)
(ST3)
(DA)
(STCXD)
(ST2)
(ST1)
(VSX5/6)
(KEY in1)
(KEY in2)
(KEY in3)
(KEY in4)
(DC)
(UP)
(DOWN)
(AC)
(+5V Vdd)
(−VF)
(GRIT1)
(GRIT2)
(GRIT3)
(GRIT4)
(GRIT5)
(GRIT6)
(GRIT7)
(GRIT8)
(GRIT9)
(GRIT10)
(SEG18)
(SEG17)
(SEG16)
(SEG15/KEY15)
(SEG14/KEY14)
(SEG13/KEY13)
(SEG12/KEY12)
(SEG11/KEY11)
(SEG10/KEY10)
(SEG9/KEY9)
(SEG8/KEY8)
(SEG7/KEY7)
(SEG6/KEY6)
(SEG5/KEY5)
(SEG4/KEY4)
(SEG3/KEY3)
(SEG2/KEY2)
(LED)
(RESET IN)
(EXTAL)
(XTAL)
(GND)
(V.MUTE)
(VIDEO)
(LA7951.2)
(LA7951.1)
(P.RY)
(SRout)
(SEG1/KEY1)
E(1:4)
D625
R626 47.0k
R642 47.0k
R631 2.2k
C607 0.022
SIMULATED ZONE
JAZZ
CHURCH
DANCE
HALL
S644
S648
S652
S656
S660
R615 47.0k
POWER
S603
R616 47.0k
VCR 1
VCR 2
LD
TV
VIDEO
TAPE 1 DAT
TAPE 2 MONITOR
CD
TUNER
PHONO
ACCOUSTIC SELECT
ACCOUSTIC MEMORY
S614
S618
S622
S626
S630
S634
S638
S642
S646
S650
S654
S658
R617 47.0k
SIMULATED STEREO
S601
S609
BASS DOWN
TREBLE DOWN
PROLOGIC
BALANCE L CH
BASS UP
3 CH LOGIC
TREBLE UP
BALANCE R CH
MUTING
S617
S621
S625
S629
S637
S641
S645
S649
S657
R618 47.0k
PROLOGIC THEATER
THEATER
S605
JP
RESET
S659
4.8
L601 ATF1108
4.9
D607
D608
R611
Q601, 602 : RMC DRIVER
X601 : AXX1033(HEZ)
: AXX1010(HB.HL)
X601
Vcc
OUT
GND
R602 100
R604 100
2SC2458
4.9
D604 AEL115I
Q603, 604 : STBY LED DRIVER
R634 10k
D628
C603
C604
C620
C605
Q606
XDC124ES
Q609
C602 10/25
Q606 : RESET
F(1:6)
Any diode without part number indicates HSS104−02.
C621 10/50
C608 10/50
J17
Vss(GND)
+5V(STBY)
+5V(MAIN)
−VF
FL1(AC1)
FL2(AC2)
WP(AC)
P.RY
R.C.RY
RMC
SRIN
SROUT
VH/VL
To POWER SUPPLY assembly CN17 (➡ SCH−8)
3.5
Q610
Q609
Q608
Q607
XDC124ES
Q607−610 : CONTROL LINE DRIVER

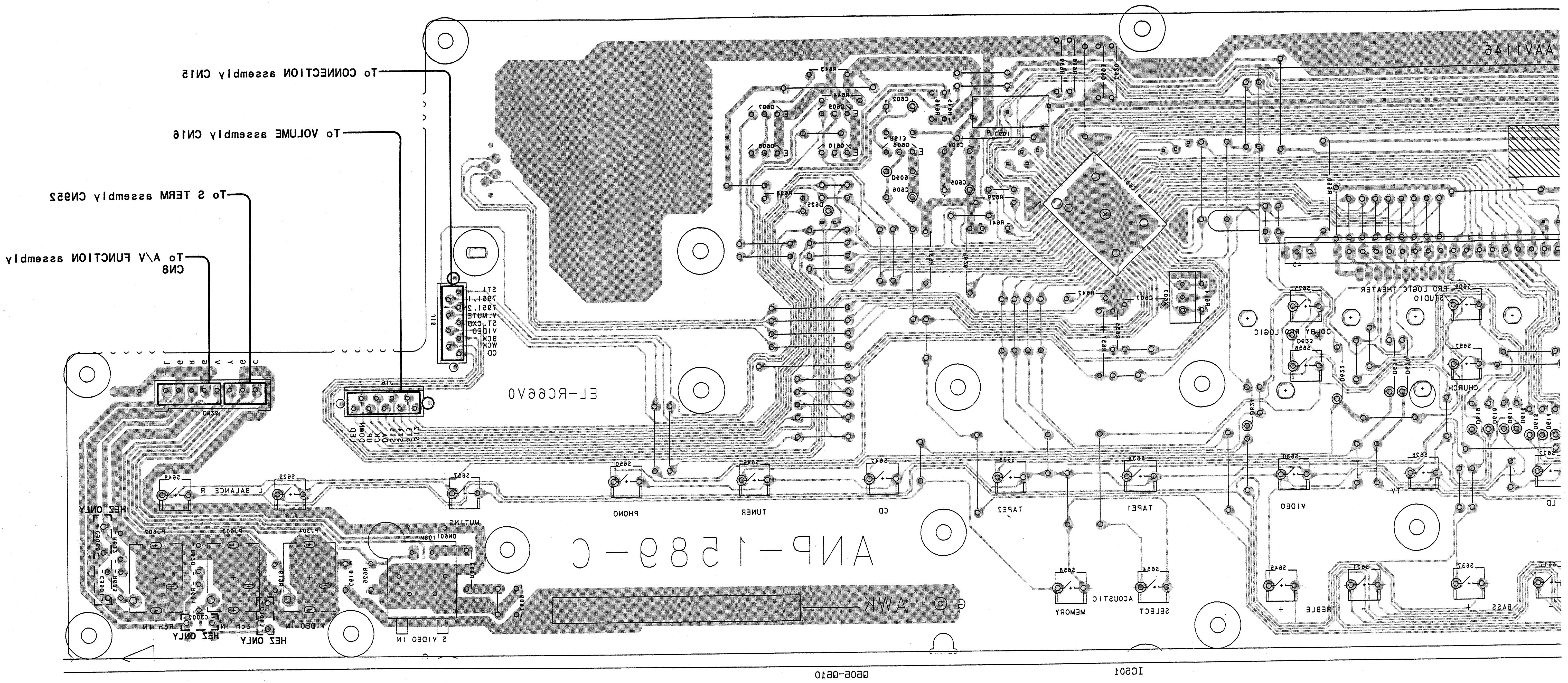

1
2
3
4
5
6
A
B
C
D
To POWER SUPPLY assembly CN17
J17
V601
AAV1146
GND
+5V(STBY)
+5V(MAIN)
-VF
FL1(AC1)
FL2(AC2)
WP.(AC)
P.RY
R.MC
RMC RY
SRIN
SROUT
VH/VL
X601
IC601
STANDBY
DOLBY 3CH LOGIC
SIM. STEREO
POWER
VCR 1
VCR 2
HALL
THEATER
/SIM. SURROUND
SIM. SURROUND
JAZZ
(for VSA-2)
PRO LOGIC THEATER
/STUDIO
CHURCH
DOLBY PRO LOGIC
LD
TV
VIDEO
TAPE1
TAPE2
CD
TUNER
RESET
BASS
TREBLE
ACOUSTIC
SELECT
MEMORY
ANP-1589
AWK
Q601-Q604
IC601
Q606-Q610

FL. U−COM assembly (AWK1729 : HEZ)
(AWK1552 : HB/HL)

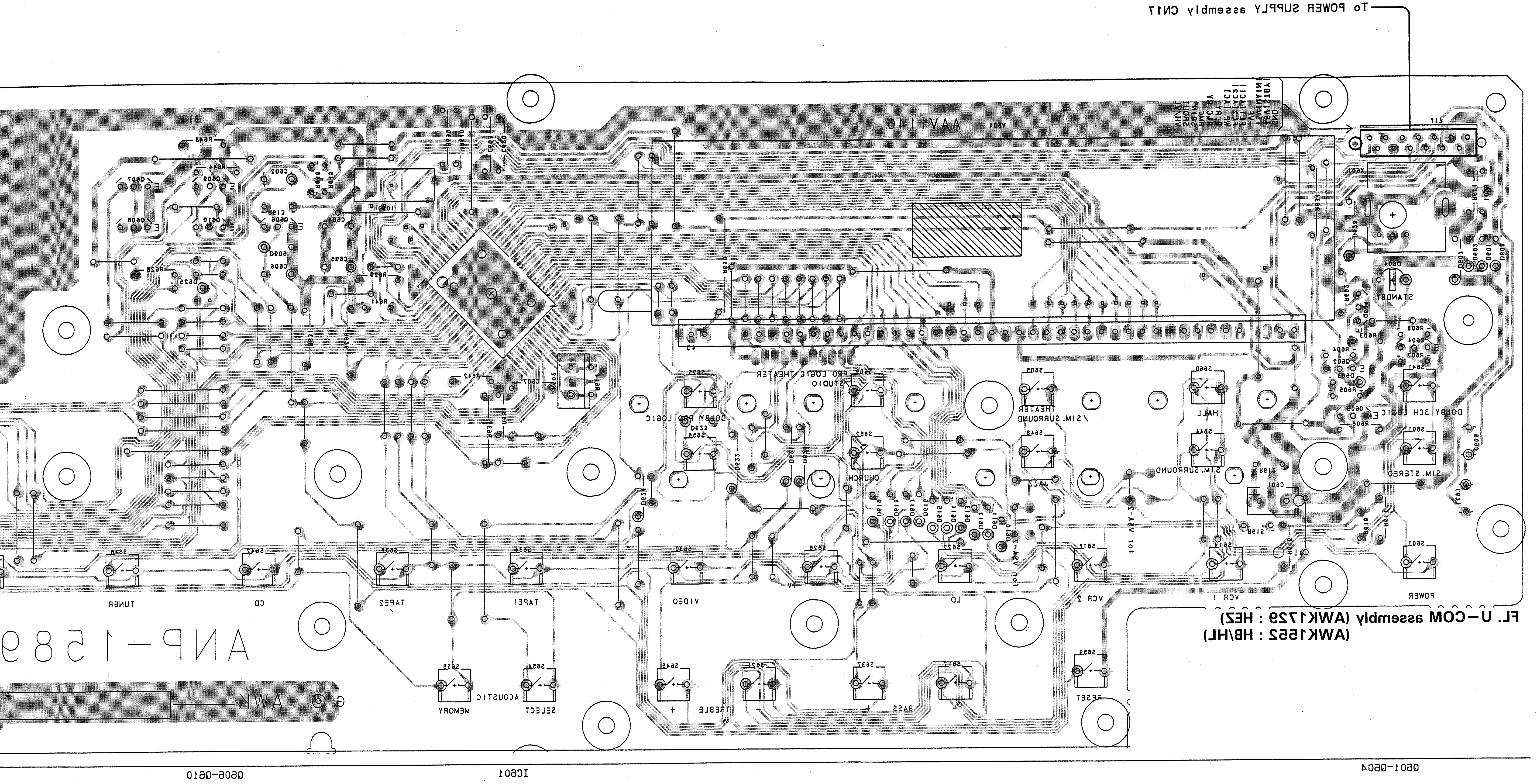
This PCB connection diagram is viewed from the parts mounted side.


1146
To CONNECTION assembly CN15
To VOLUME assembly CN16
To S TERM assembly CN952
To A/V FUNCTION assembly CN8
IC601
Q606
Q607
Q608
Q609
Q610
D625
C602
C604
C605
C606
C607
R628
R629
R641
R642
R643
R644
R650
S609
PRO LOGIC THEATER
STUDIO
S625
DOLBY PRO LOGIC
S652
S656
CHURCH
S626
TV
S630
VIDEO
S634
TAPE1
S638
TAPE2
S642
CD
S646
TUNER
S650
PHONO
S657
MUTING
S629
L BALANCE R
S649
HEZ ONLY
S637
BASS
S621
TREBLE
S645
S654
SELECT
ACOUSTIC
S658
MEMORY
ST1
7951.1
7951.2
V.MUTE
ST.CXD
VIDEO
BCK
WCK
CD
J15
J16
ST2
ST3
ST4
ST5
OA
CK
UP
DOWN
LED
CN28
EL-RC66V0
ANP-1589-C
AWK
DN601
PJ304
PJ603
PJ602
VIDEO IN
Lch IN
Rch IN
S VIDEO IN
HEZ ONLY
HEZ ONLY
C3000
C3001
C3002
C3003
R622
R623
R624
R625
R620
R621
IC601
Q606-Q610

This PCB connection diagram is viewed from the parts mounted side.

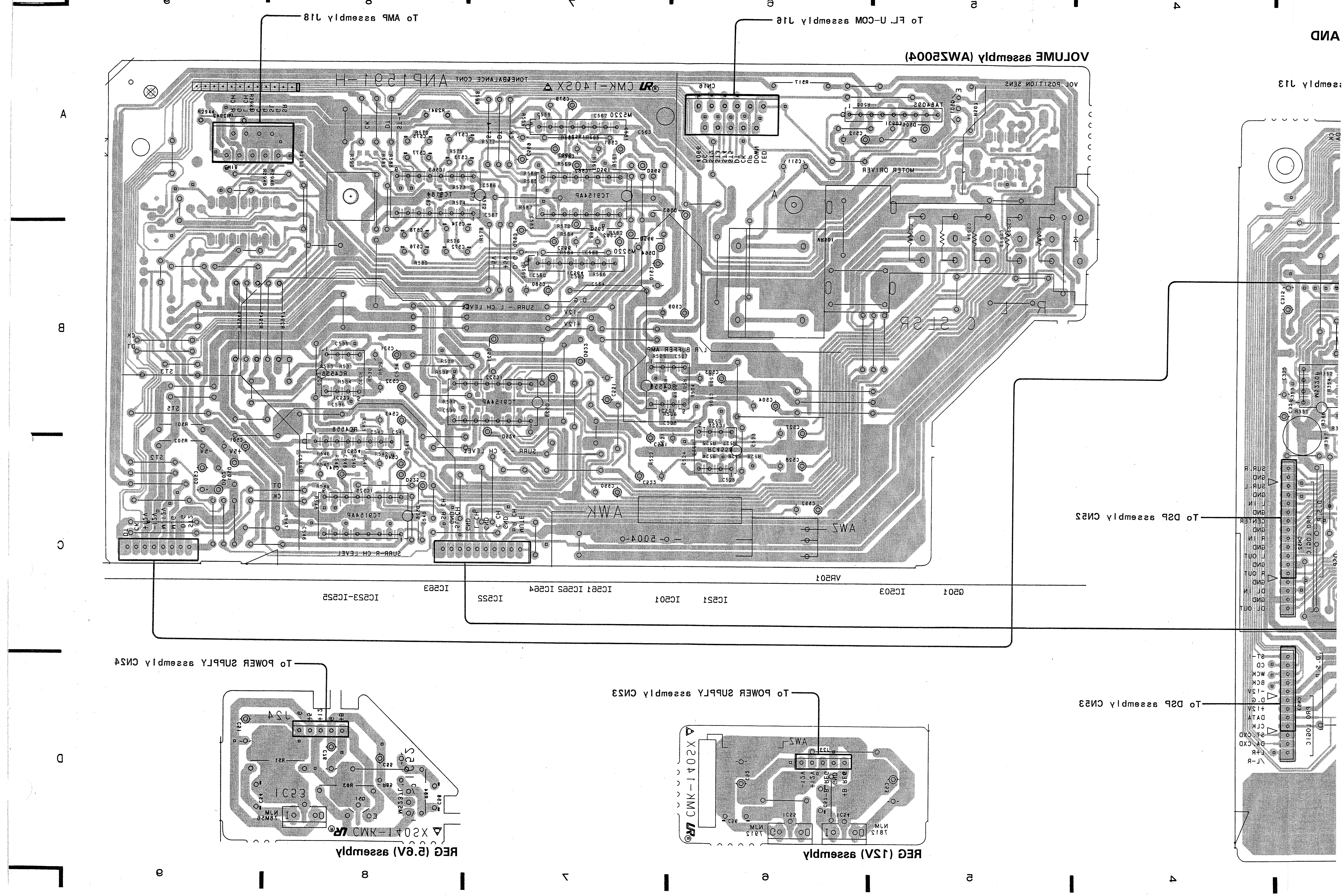

To CONNECTION assembly CN15
To VOLUME assembly CN16
To S TERM assembly CN952
To A/V FUNCTION assembly CN8
ANP-1589-C
EL-RC66V0
AWK
AAV1146
IC601
Q606-Q610
PHONO
TUNER
CD
TAPE2
TAPE1
VIDEO
TV
LD
MEMORY
ACOUSTIC SELECT
TREBLE
BASS
BALANCE
MUTING
S VIDEO IN
VIDEO IN
Lch IN
Rch IN
HEZ ONLY
DOLBY PRO LOGIC
PRO LOGIC THEATER
STUDIO
CHURCH
J15
J16
CN38

This PCB connection diagram is viewed from the foil side.


To POWER SUPPLY assembly CN17
AAV1146
STANDBY
PRO LOGIC THEATER
STUDIO
DOLBY PRO LOGIC
THEATER
/SIM.SURROUND
HALL
DOLBY 3CH LOGIC
CHURCH
JAZZ
SIM.SURROUND
SIM.STEREO
TUNER
CD
TAPE2
TAPE1
VIDEO
TV
LD
VCR 2
VCR 1
POWER
ANP-1589
AWK
MEMORY
ACOUSTIC
SELECT
TREBLE
BASS
RESET
Q606–Q610
IC601
Q601–Q604
6
5
4
3
2
1
A
B
C
D

FL. U–COM assembly (AWK1729 : HEZ)
(AWK1552 : HB/HL)

This PCB connection diagram is viewed from the foil side.

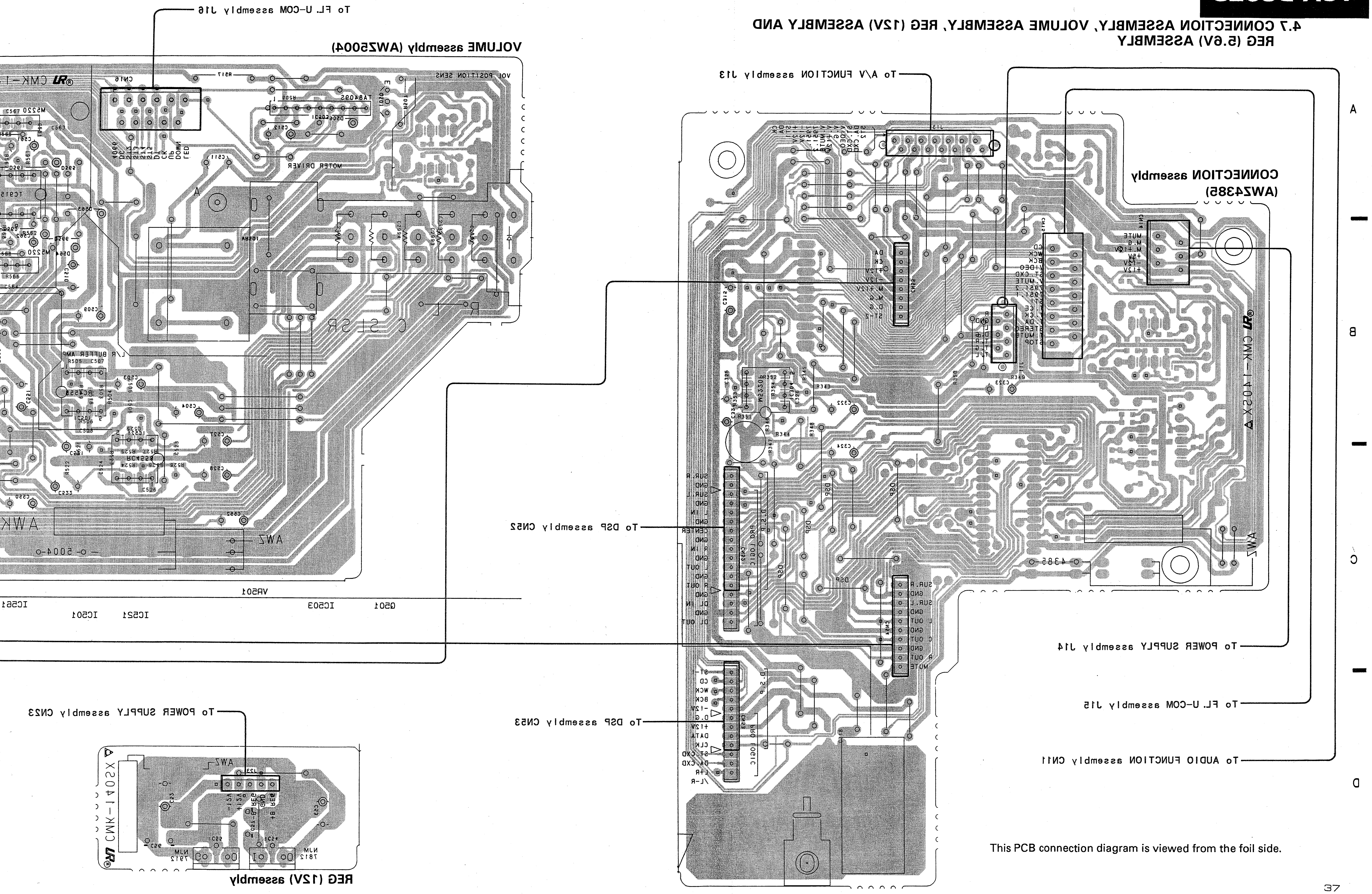

VOLUME assembly (AWZ5004)

REG (5.6V) assembly

REG (12V) assembly

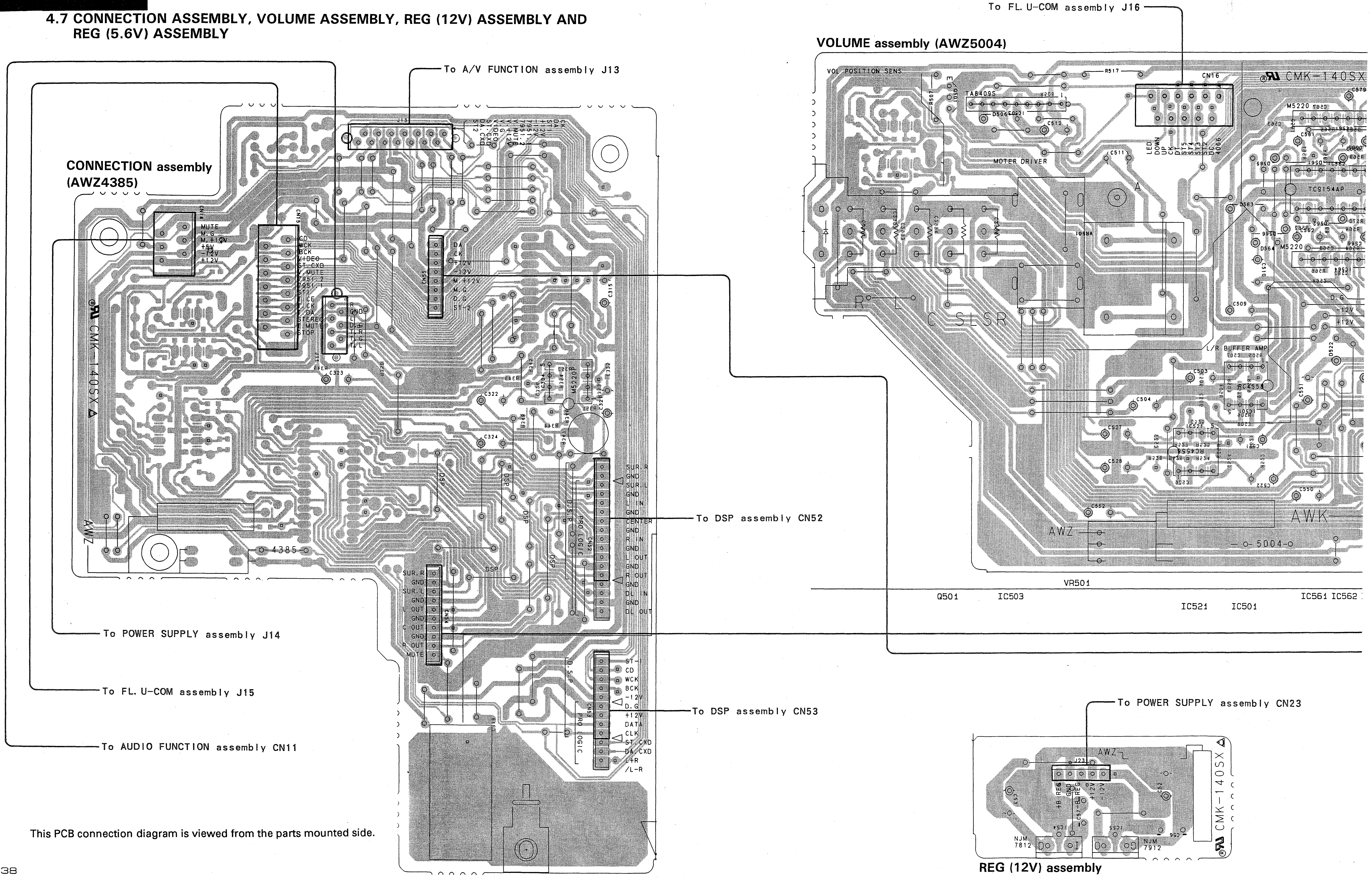
AND
To AMP assembly J18
To FL U-COM assembly J16
assembly J13
To DSP assembly CN52
To DSP assembly CN53
To POWER SUPPLY assembly CN24
To POWER SUPPLY assembly CN23
ANP1591-H
CMK-1405X
TONE&BALANCE CONT
VOL POSITION SENS
MOTER DRIVER
L/R BUFFER AMP
SURR - L CH LEVEL
SURR - C CH LEVEL
SURR-R CH LEVEL
AWK
AWZ
-C-5004-
VR501
IC563
IC523-IC525
IC522
IC561 IC562 IC564
IC501
IC521
IC503
Q501
J24
IC551
CMK-XS041
A
B
C
D
9
8
7
6
5
4

4.7 CONNECTION ASSEMBLY, VOLUME ASSEMBLY, REG (12V) ASSEMBLY AND REG (5.6V) ASSEMBLY

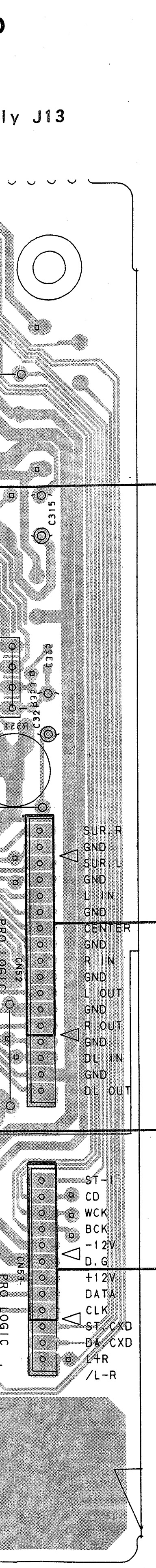

VOLUME assembly (AWZ5004)
To FL U-COM assembly J16
To A/V FUNCTION assembly J13
CONNECTION assembly (AWZ4385)
To DSP assembly CN52
To DSP assembly CN3
To POWER SUPPLY assembly J14
To FL U-COM assembly J15
To AUDIO FUNCTION assembly CN11
To POWER SUPPLY assembly CN23
REG (12V) assembly
CN16
CN13
CN14
CN15
CN51
CN52
CN53
CN54
MOTER DRIVER
L/R BUFFER AMP
VOL POSITION SENS
VR501
IC501
IC503
IC521
IC561
Q501
MUTE
M.G
M.+12V
+5V
-12V
+12V
SUR.R
GND
SUR.L
L IN
CENTER
R IN
L OUT
R OUT
DL IN
DL OUT
C OUT
ST-1
CD
WCK
BCK
D.G
DATA
CLK
ST.CXD
DA.CXD
L+R
L-R
DA
CK
VIDEO
STEREO
F.MUTE
STOP
DSP
PRO LOGIC
NJM 7812
NJM 7912
XS041-KMC
XS040-KMC
A B C D
1 2 3 4 5 6

This PCB connection diagram is viewed from the foil side.

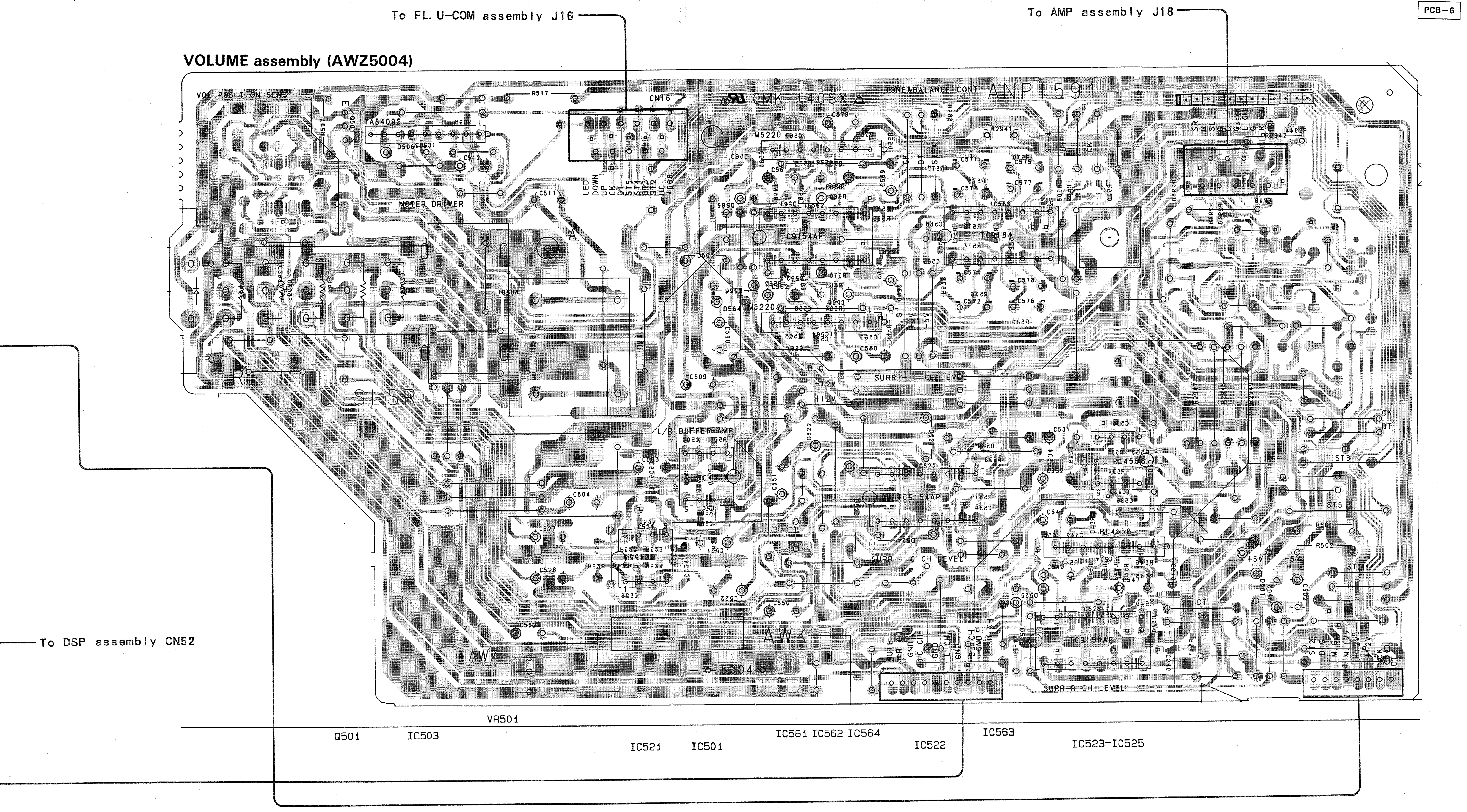
4.7 CONNECTION ASSEMBLY, VOLUME ASSEMBLY, REG (12V) ASSEMBLY AND REG (5.6V) ASSEMBLY

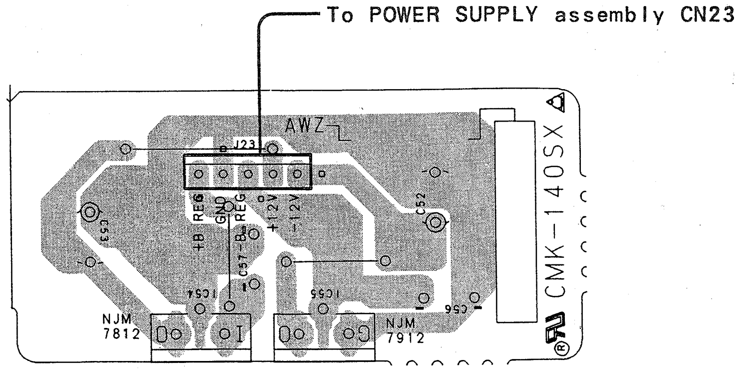

1
2
3
4
5
6
7
A
B
C
D
CONNECTION assembly
(AWZ4385)
To A/V FUNCTION assembly J13
J13
CK
DA
ST1
+12V
-12V
7951.1
7951.2
V.MUTE
V.+12V
V.G
VIDEO
ST.CXD
DA.CXD
ST2
CN14
MUTE
M.G
M.+12V
+5V
-12V
+12V
CN15
CD
WCK
BCK
VIDEO
ST.CXD
V.MUTE
7951.2
7951.1
ST1
T.CE
T.CK
T.DA
STEREO
T.MUTE
STOP
J11
R
GND
L
D.G
T.R
T.G
T.L
CN55
DA
CK
+12V
-12V
M.+12V
M.G
D.G
ST-2
C323
C322
C324
C315
M5220
CMK-140SX
AWZ
4385
SUR.R
GND
SUR.L
GND
L IN
GND
CENTER
GND
R IN
GND
L OUT
GND
R OUT
GND
DL IN
GND
DL OUT
CN52
DSP
D.S.P
PRO LOGIC
To DSP assembly CN52
SUR.R
GND
SUR.L
GND
L OUT
GND
C OUT
GND
R OUT
MUTE
CN54
ST-1
CD
WCK
BCK
-12V
D.G
+12V
DATA
CLK
ST.CXD
DA.CXD
L+R
/L-R
CN53
To DSP assembly CN53
To POWER SUPPLY assembly J14
To FL. U-COM assembly J15
To AUDIO FUNCTION assembly CN11
To FL. U-COM assembly J16
VOLUME assembly (AWZ5004)
VOL POSITION SENS
R507
R517
TA8409S
D506
C512
C511
MOTER DRIVER
CN16
LED
DOWN
UP
CK
DT
ST5
ST4
ST3
ST2
DC
4066
CMK-140SX
M5220
C561
TC9154AP
D563
D564
C562
C509
D.G
-12V
+12V
L/R BUFFER AMP
C503
C504
RC4558
D522
C551
C527
C528
IC521
C552
C550
C522
R
L
C
SL
SR
A
AWZ
AWK
5004
VR501
Q501
IC503
IC521
IC501
IC561
IC562
To POWER SUPPLY assembly CN23
AWZ
J23
+B REG
GND
-B REG
+12V
-12V
C53
C52
C57
IC54
IC55
C56
NJM
7812
NJM
7912
CMK-140SX
REG (12V) assembly

This PCB connection diagram is viewed from the parts mounted side.

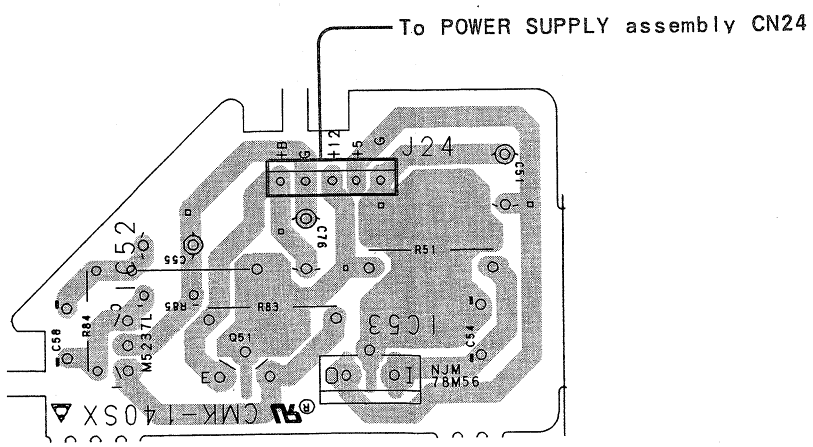

ly J13
SUR.R
GND
SUR.L
GND
L IN
GND
CENTER
GND
R IN
GND
L OUT
GND
R OUT
GND
DL IN
GND
DL OUT
CN52
C315
C332
ST-I
CD
WCK
BCK
-12V
D.G
+12V
DATA
CLK
ST CXD
DA CXD
L+R
/L-R
CN53
PRO LOGIC
To DSP assembly CN53

VOLUME assembly (AWZ5004)


To FL. U-COM assembly J16
To AMP assembly J18
To DSP assembly CN52
VOL POSITION SENS
R517
CN16
CMK-140SX
TONE&BALANCE CONT
ANP1591-H
TA8409S
D506
C512
C511
MOTER DRIVER
LED
DOWN
UP
CK
DT
ST5
ST4
ST3
ST2
4066
M5220
C561
IC562
TC9154AP
TC9154
IC563
R2941
R2942
C579
C571
C573
C575
C577
C574
C578
C572
C576
ST-4
DT
CK
SR
SL
G
C
G
L CH
R CH
D563
D564
D565
VR501
C510
C509
D.G
-12V
+12V
+5V
-5V
SURR - L CH LEVEL
L/R BUFFER AMP
RC4558
C503
C504
C527
C528
IC521
C522
C531
C532
IC522
R2947
R2945
R2946
C545
C550
C552
SURR - C CH LEVEL
C551
D521
D522
D523
D525
IC525
C501
C502
D501
D502
R501
R502
CK
DT
ST3
ST5
ST2
MUTE CH
GND
C CH
GND
SL CH
GND
SR CH
ST2
D.G
M.G
+12V
-12V
+5V
CK
DT
SURR-R CH LEVEL
AWZ
AWK
5004
R
L
C
SL
SR
A
VR501
Q501
IC503
IC521
IC501
IC561 IC562 IC564
IC522
IC563
IC523-IC525

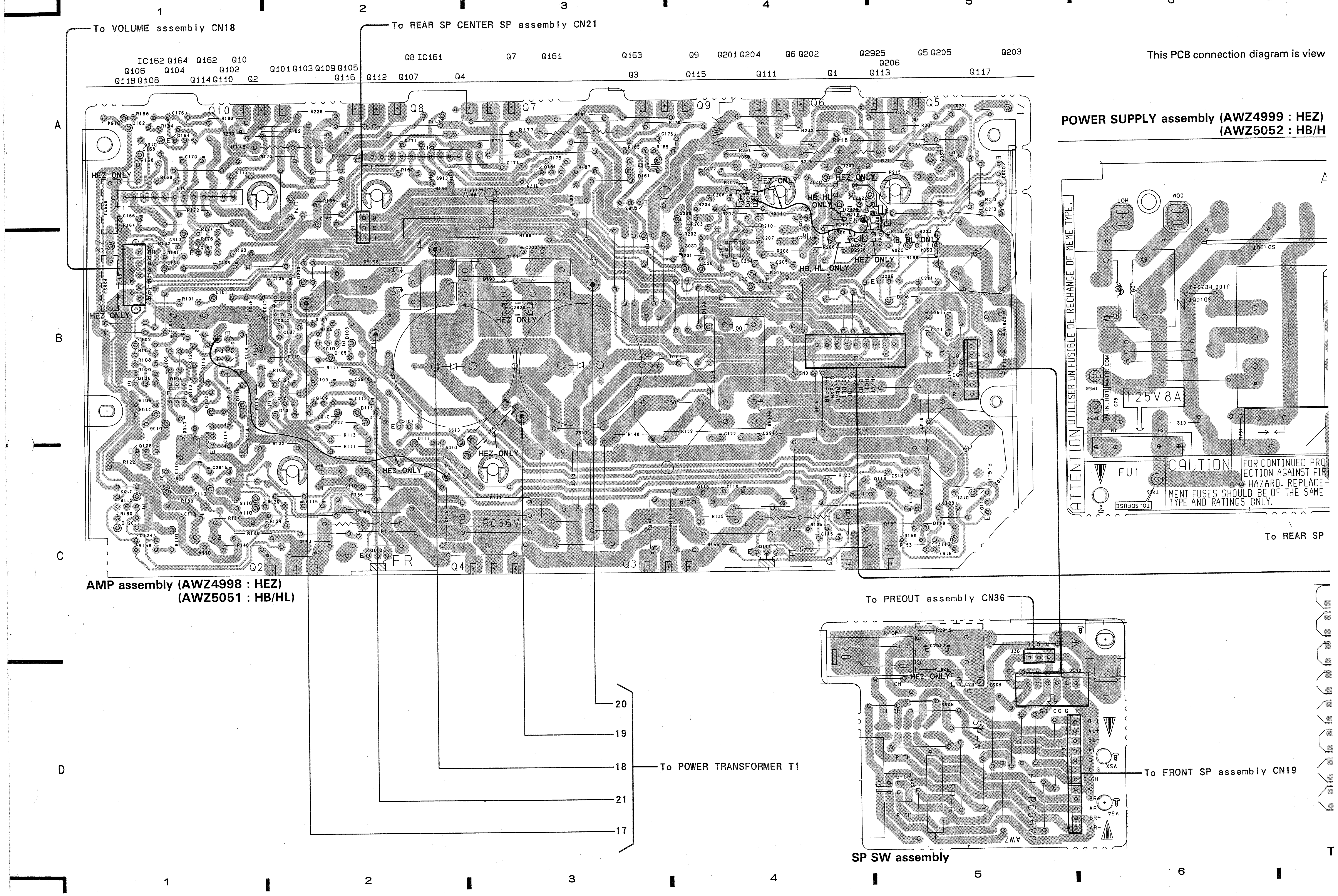

To POWER SUPPLY assembly CN23
J23
AWZ
+B REG
GND
ST-B REG
+12V
-12V
C53
C52
C54
C56
IC54
IC55
NJM 7812
NJM 7912
CMK-140SX

REG (12V) assembly


To POWER SUPPLY assembly CN24
+B
G
+12
+5
G
J24
IC52
C55
C76
R51
R83
R84
R85
C58
Q51
M5237L
IC53
C54
C53
NJM 78M56
CMK-140SX

REG (5.6V) assembly

This PCB connection diagram is view

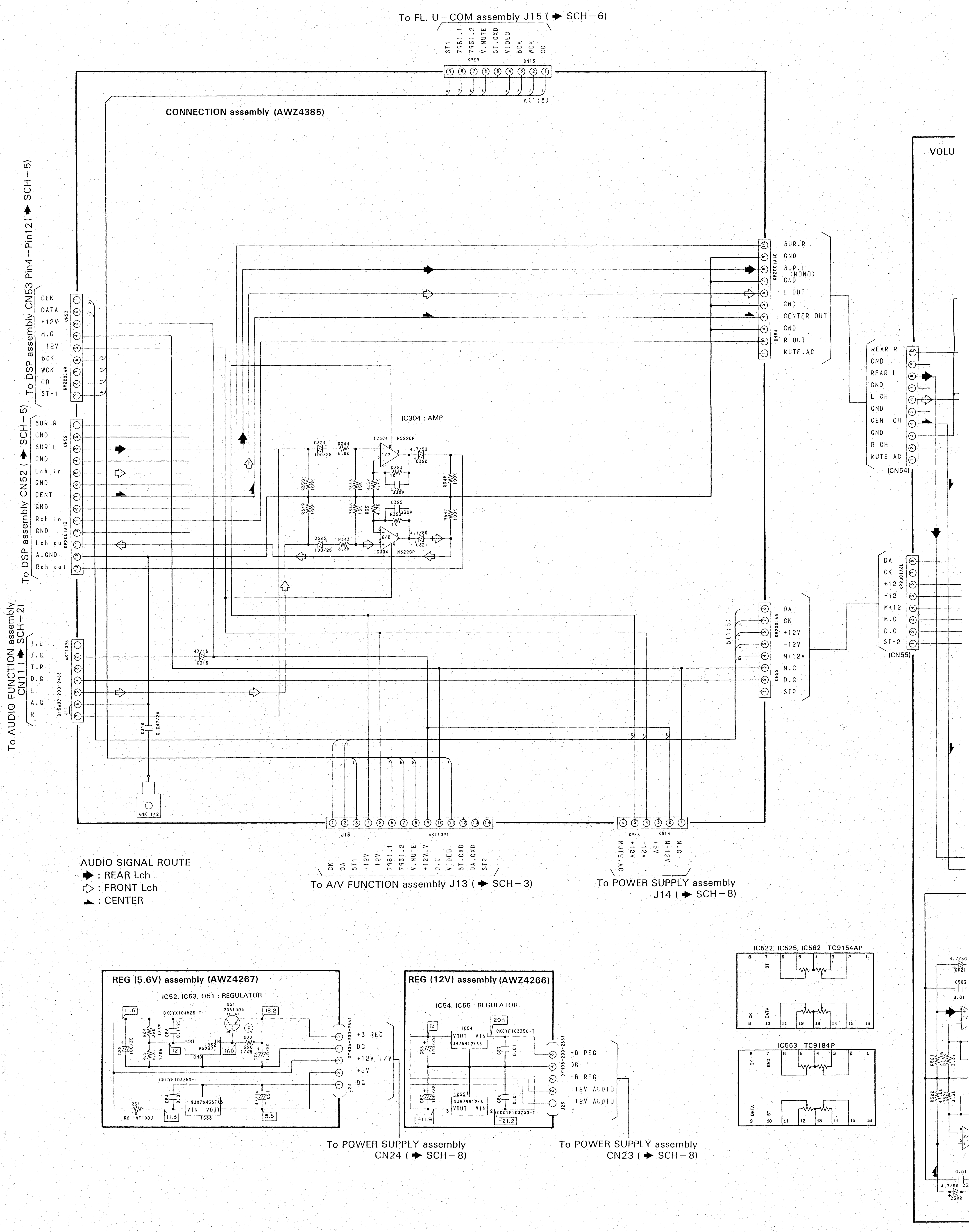


AMP assembly (AWZ4998 : HEZ)
(AWZ5051 : HB/HL)

POWER SUPPLY assembly (AWZ4999 : HEZ)
(AWZ5052 : HB/H

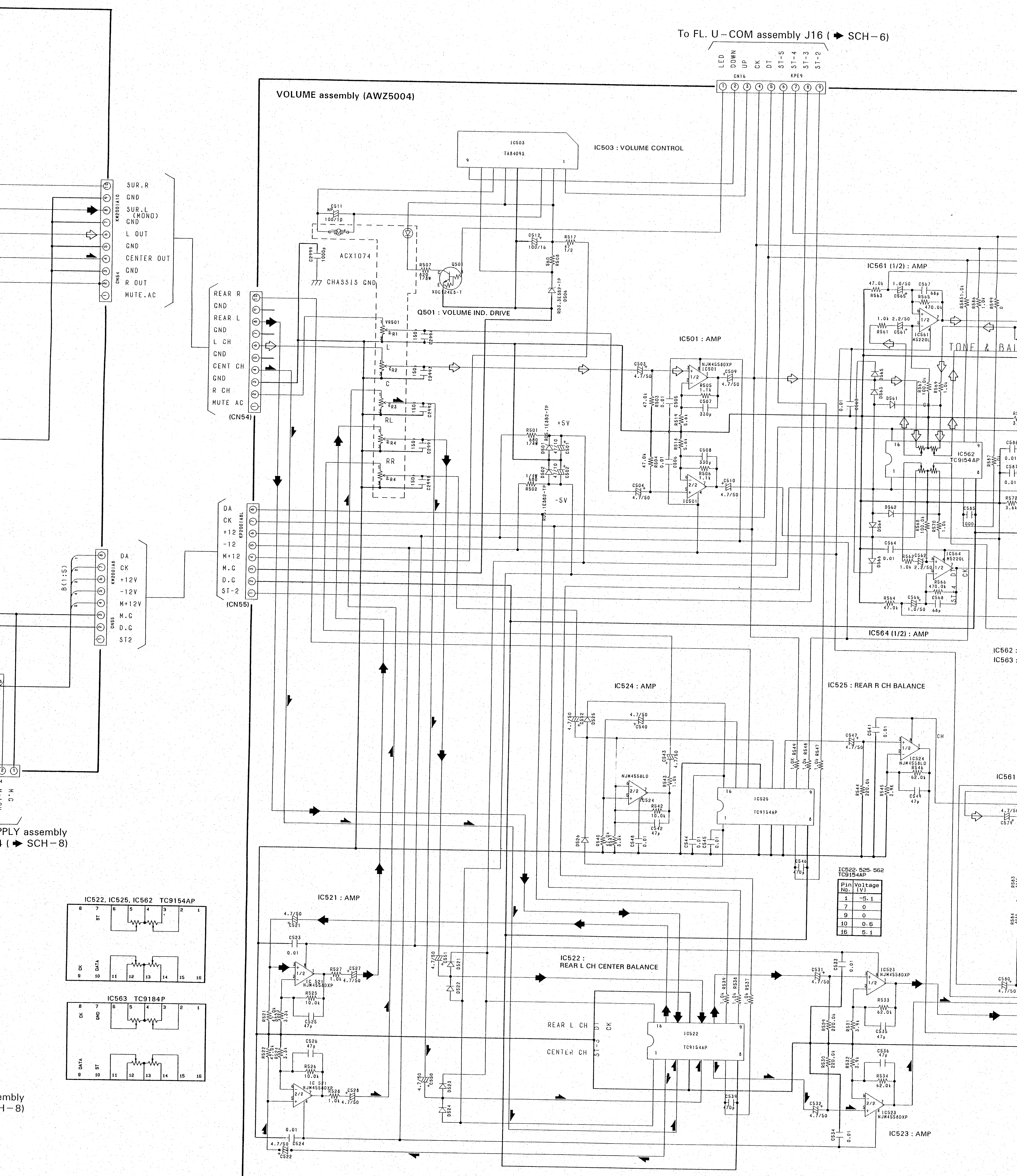
SP SW assembly

1
2
3
4
5
6
A
B
C
D
To VOLUME assembly CN18
To REAR SP CENTER SP assembly CN21
HEZ ONLY
HB, HL ONLY
AWZ
EL-RC66V0
FR
To POWER TRANSFORMER T1
20
19
18
21
17
To PREOUT assembly CN36
To FRONT SP assembly CN19
To REAR SP
125V8A
FU1
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD. REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
ATTENTION UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE.
HOT
COM
SP-A
SP-B
R CH
L CH
T


To FL. U-COM assembly J15 (➡ SCH-6)
ST1
7951.1
7951.2
V.MUTE
ST.CXD
VIDEO
BCK
WCK
CD
KPE9
CN15
A(1:8)
CONNECTION assembly (AWZ4385)
VOLU
To DSP assembly CN53 Pin4-Pin12 (➡ SCH-5)
CLK
DATA
+12V
M.G
-12V
BCK
WCK
CD
ST-1
CN53
KM200IA9
To DSP assembly CN52 (➡ SCH-5)
SUR R
GND
SUR L
GND
Lch in
GND
CENT
GND
Rch in
GND
Lch ou
A.GND
Rch out
CN52
KM200IA13
To AUDIO FUNCTION assembly CN11 (➡ SCH-2)
T.L
T.G
T.R
D.G
L
A.G
R
AKT1026
D15A07-200-2468
J11
C315 47/16
C318 0.047/25
ANK-142
IC304 : AMP
IC304 NS220P
C324 100/25
R344 6.8K
C322 4.7/50
R354 1K
C326 330P
R350 100K
R346 15K
R352 4.7K
R348 100K
R349 100K
R345 15K
R351 4.7K
C325 330P
R353 1K
R347 100K
C323 100/25
R343 6.8K
C321 4.7/50
SUR.R
GND
SUR.L (MONO)
GND
L OUT
GND
CENTER OUT
GND
R OUT
MUTE.AC
CN54
KM200IA10
REAR R
GND
REAR L
GND
L CH
GND
CENT CH
GND
R CH
MUTE AC
(CN54)
DA
CK
+12
-12
M+12
M.G
D.G
ST-2
KP200IA8L
(CN55)
B(1:5)
DA
CK
+12V
-12V
M+12V
M.G
D.G
ST2
CN55
KM200IA8
J13
AKT1021
CK
DA
ST1
+12V
-12V
7951.1
7951.2
V.MUTE
+12V.V
D.G
VIDEO
ST.CXD
DA.CXD
ST2
To A/V FUNCTION assembly J13 (➡ SCH-3)
KPE6
CN14
MUTE.AC
+12V
-12V
+5V
M+12V
M.G
To POWER SUPPLY assembly J14 (➡ SCH-8)
AUDIO SIGNAL ROUTE
➡ : REAR Lch
⇨ : FRONT Lch
▲ : CENTER
REG (5.6V) assembly (AWZ4267)
IC52, IC53, Q51 : REGULATOR
Q51 2SA1306
11.6
18.2
CKCYX104M25-T
C55 100/35
R84 36K 1/4W
R85 4.3K 1/8W
C58 0.1/25
IC52 NS25TC
CNT
IN
GND
12
17.5
R83 220 1/4W
C79 1.0/50
CKCYF103Z50-T
C54 0.01
NJM78M56FA
VIN VOUT
IC53
C51 47/16
R51 10 RS1/4F100J
11.3
5.5
+B REC
DG
+12V T/V
+5V
DG
J24
DYH05-200-2651
To POWER SUPPLY assembly CN24 (➡ SCH-8)
REG (12V) assembly (AWZ4266)
IC54, IC55 : REGULATOR
12
20.1
IC54
VOUT VIN
NJM78M12FA5
C53 100/35
CKCYF103Z50-T
C57 0.01
IC551
NJM79M12FA
VOUT VIN
C52 100/35
C56 0.01
CKCYF103Z50-T
-11.9
-21.2
+B REG
DG
-B REG
+12V AUDIO
-12V AUDIO
J23
DYH05-200-2651
To POWER SUPPLY assembly CN23 (➡ SCH-8)
IC522, IC525, IC562 TC9154AP
CK
DATA
ST
IC563 TC9184P
CK
GND
DATA
ST
RS21
RS22
C523
C522 4.7/50
0.01
1
2
3
4
5
A
B
C
D
E
F

SCH-7

CONNECTION assembly,
VOLUME assembly,
REG (12V) assembly,
REG (5.6V) assembly

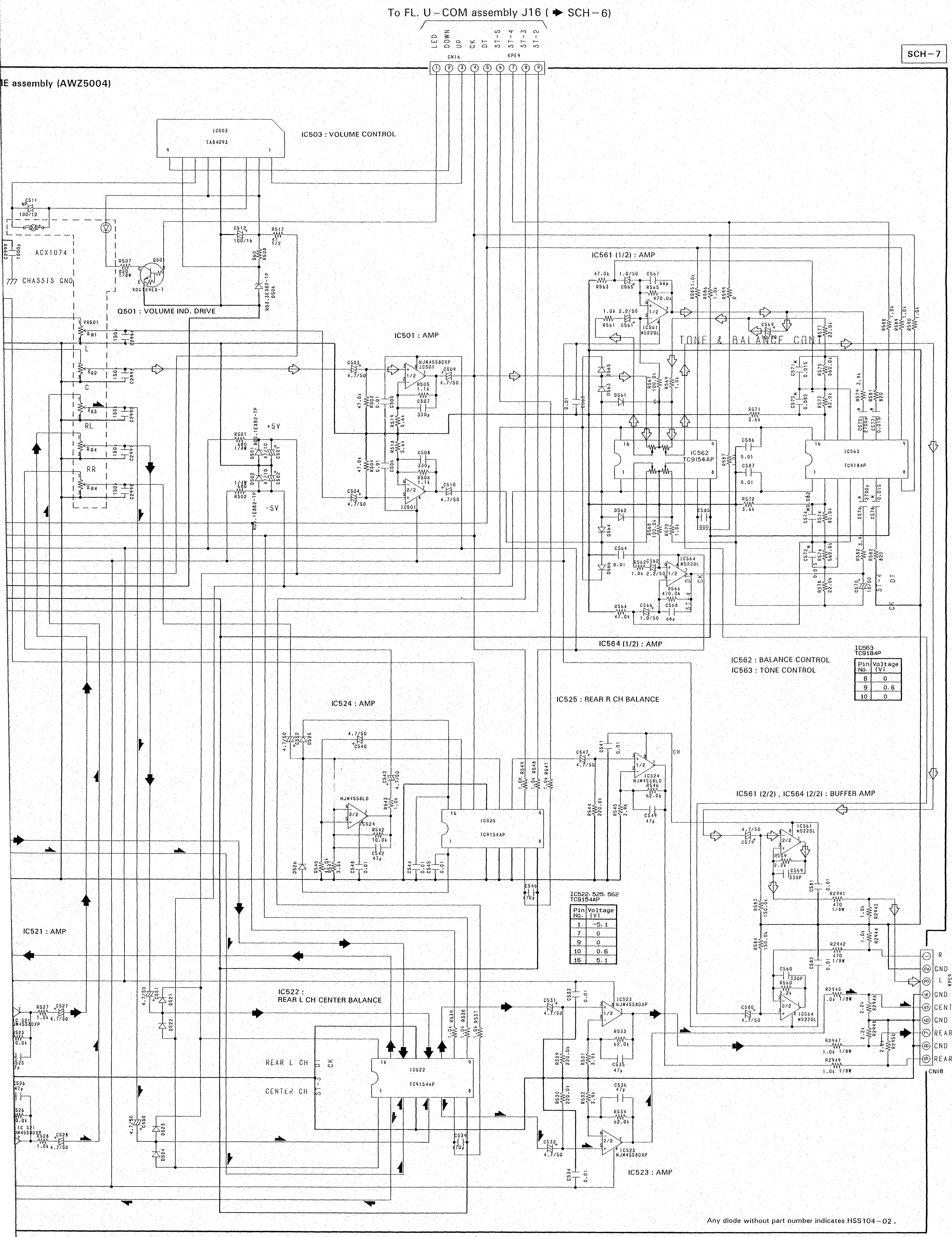

4
5
6
7
8
To FL. U-COM assembly J16 (➡ SCH-6)
LED
DOWN
UP
CK
DT
ST-5
ST-4
ST-3
ST-2
CN16
KPE9
VOLUME assembly (AWZ5004)
IC503
TA84095
IC503 : VOLUME CONTROL
SUR.R
GND
SUR.L (MONO)
GND
L OUT
GND
CENTER OUT
GND
R OUT
MUTE.AC
CN54
KM200IA10
REAR R
GND
REAR L
GND
L CH
GND
CENT CH
GND
R CH
MUTE AC
(CN54)
ACX1074
CHASSIS GND
Q501 : VOLUME IND. DRIVE
XDC124ES-T
IC501 : AMP
NJM4558DXP
+5V
-5V
B(1:5)
DA
CK
+12V
-12V
M+12V
M.G
D.G
ST2
CN55
KM200IA8
DA
CK
+12
-12
M+12
M.G
D.G
ST-2
KP200IA8L
(CN55)
IC561 (1/2) : AMP
TONE & BAL
IC562
TC9154AP
IC564 (1/2) : AMP
IC562 :
IC563 :
IC524 : AMP
NJM4558LD
IC525 : REAR R CH BALANCE
IC525
TC9154AP
IC561
PPLY assembly
(➡ SCH-8)
IC521 : AMP
IC522 :
REAR L CH CENTER BALANCE
REAR L CH
CENTER CH
IC522
TC9154AP
IC523 : AMP
NJM4558DXP
IC522, IC525, IC562 TC9154AP
IC563 TC9184P
embly
H-8)

IC522·525·562
TC9154AP

Pin No.	Voltage (V)
1	-5.1
7	0
9	0
10	0.6
16	5.1

Any diode withou

CONNECTIO
VOLUM
REG (12V
REG (5.6


To FL. U-COM assembly J16 (➡ SCH-6)
LED
DOWN
UP
CK
DT
ST-5
ST-4
ST-3
ST-2
CN16
KPE9
SCH-7
E assembly (AWZ5004)
IC503 : VOLUME CONTROL
IC503
TA8409S
ACX1074
CHASSIS GND
Q501 : VOLUME IND. DRIVE
XOC124E5-T
IC501 : AMP
NJM4558DXP
+5V
-5V
IC561 (1/2) : AMP
TONE & BALANCE CONT
IC562
TC9154AP
IC563
TC9184P
IC564 (1/2) : AMP
IC562 : BALANCE CONTROL
IC563 : TONE CONTROL
IC524 : AMP
IC525 : REAR R CH BALANCE
IC525
TC9154AP
CH
IC561 (2/2) , IC564 (2/2) : BUFFER AMP
IC521 : AMP
IC522 :
REAR L CH CENTER BALANCE
REAR L CH
CENTER CH
IC522
TC9154AP
IC523 : AMP
NJM4558DXP
R
GND
L
GND
CENTER
GND
REAR L
GND
REAR R
CN18
To AMP assembly J18 (➡ SCH-8)

IC563
TC9184P

Pin No.	Voltage (V)
8	0
9	0.6
10	0

IC522, 525, 562
TC9154AP

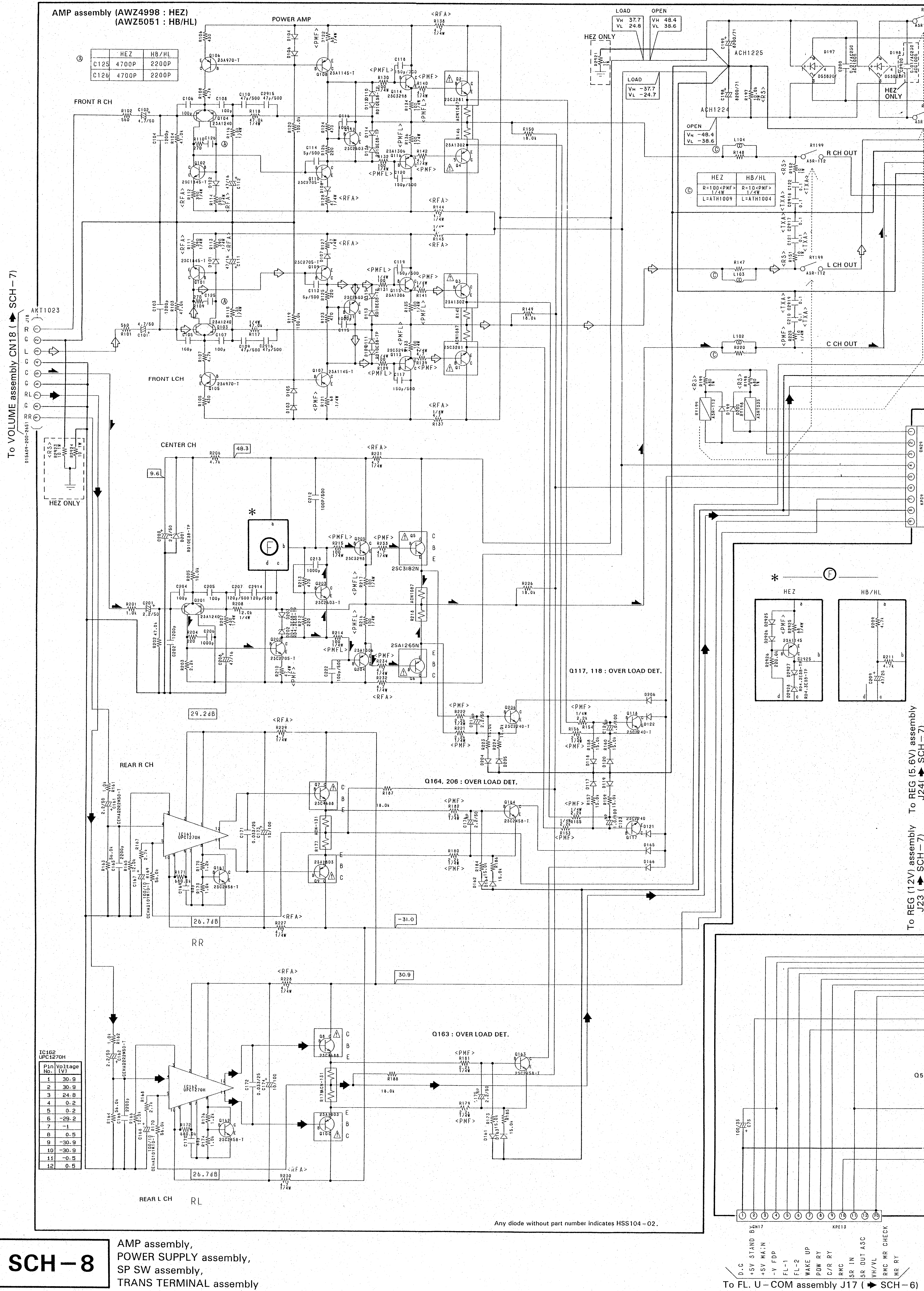
Pin No.	Voltage (V)
1	-5.1
7	0
9	0
10	0.6
16	5.1

Any diode without part number indicates HSS104-02.

CONNECTION assembly,
VOLUME assembly,
REG (12V) assembly,
REG (5.6V) assembly

SCH-7

4.8 AMP ASSEMBLY, POWER SUPPLY ASSEMBLY, SP SW ASSEMBLY AND TRANS TERMINAL ASSEMBLY


AMP assembly (AWZ4998 : HEZ)
(AWZ5051 : HB/HL)
POWER AMP
FRONT R CH
FRONT LCH
CENTER CH
REAR R CH
REAR L CH
RR
RL
To VOLUME assembly CN18 (➔ SCH−7)
AKT1023
J16
D15A09-200-265I
HEZ ONLY
LOAD
OPEN
VH 37.7
VL 24.8
VH 48.4
VL 38.6
VH −37.7
VL −24.7
VH −48.4
VL −38.6
ACH1225
ACH1224
R CH OUT
L CH OUT
C CH OUT
RY199
RY196
ASR-112
ASR103S
48.3
9.6
29.2dB
26.7dB
−31.0
30.9
Q117, 118 : OVER LOAD DET.
Q164, 206 : OVER LOAD DET.
Q163 : OVER LOAD DET.
UPC1270H
IC161
IC162
2SC3182N
2SA1265N
2SC3281
2SA1302
2SA970-T
2SA1240
2SC1145-T
2SA1145-T
2SC2705-T
2SA1306
2SC3298
2SC2603
2SC4468
2SA1803
2SC2458-T
2SC2240-T
ACN1067
ACN-131
<RFA>
<PMF>
<PMFL>
<RS>
<TXA>
HEZ
HB/HL
*
F
To REG (12V) assembly J23 (➔ SCH−7)
To REG (5.6V) assembly J24 (➔ SCH−7)
CN17
KPE13
CN29
KPC9
D.C
+5V STAND BY
+5V MAIN
−V FDP
FL−1
FL−2
WAKE UP
POW RY
C/R RY
RMC
SR IN
SR OUT ASC
VH/VL
RMC MR CHECK
MR RY
To FL. U−COM assembly J17 (➔ SCH−6)
Any diode without part number indicates HSS104−02.

	HEZ	HB/HL
C125	4700P	2200P
C126	4700P	2200P

	HEZ	HB/HL
	R=100<PMF> 1/4W	R=10<PMF> 1/4W
	L=ATH1009	L=ATH1004

IC162
UPC1270H

Pin No.	Voltage (V)
1	30.9
2	30.9
3	24.8
4	0.2
5	0.2
6	−29.2
7	−1
8	0.5
9	−30.9
10	−30.9
11	−0.5
12	0.5

SCH−8

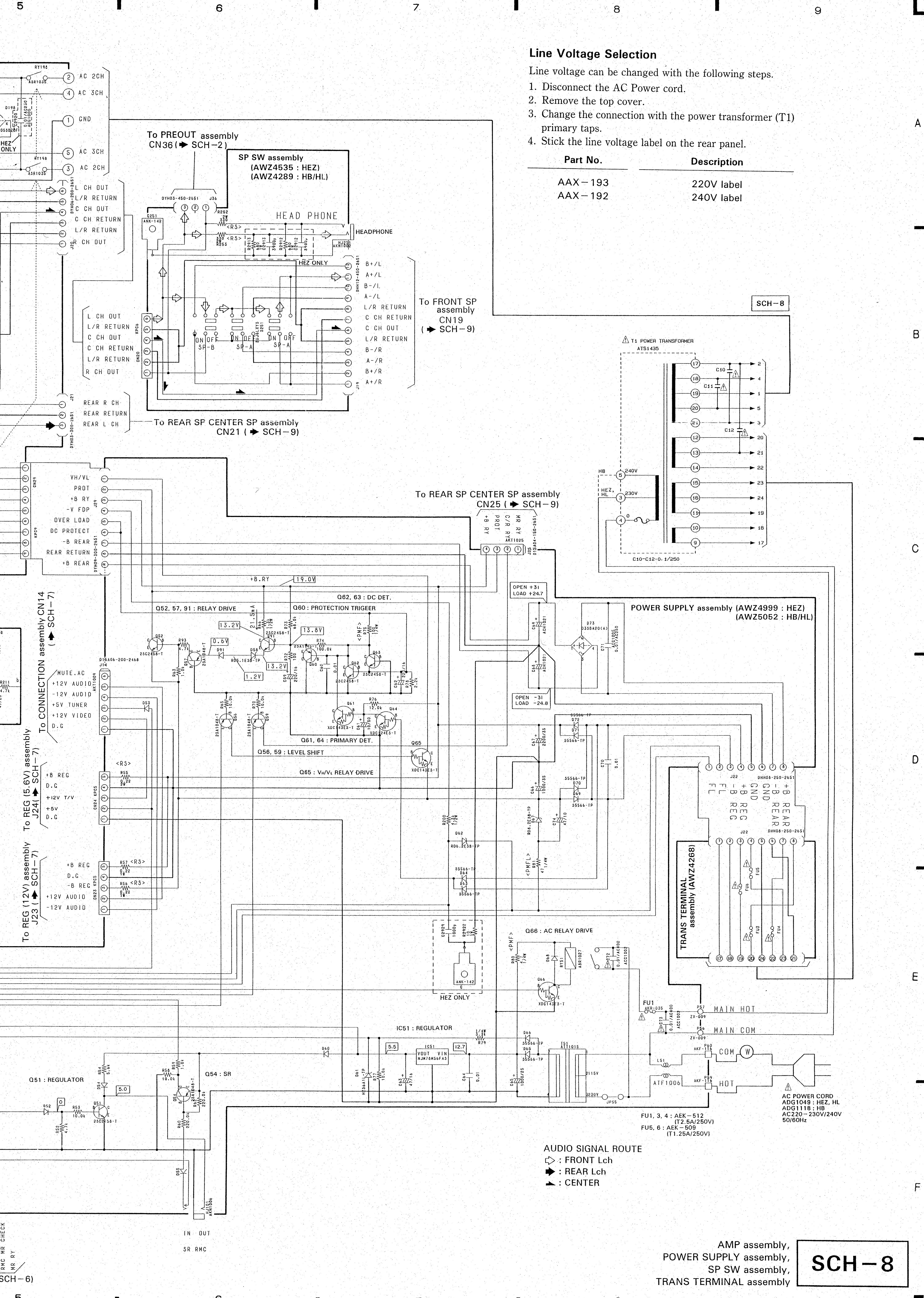
AMP assembly,
POWER SUPPLY assembly,
SP SW assembly,
TRANS TERMINAL assembly

Line Voltage Selection

Line voltage can be changed with the following steps.

1. Disconnect the AC Power cord.
2. Remove the top cover.
3. Change the connection with the power transformer (T1) primary taps.
4. Stick the line voltage label on the rear panel.

Part No.	Description
AAX−193	220V label
AAX−192	240V label

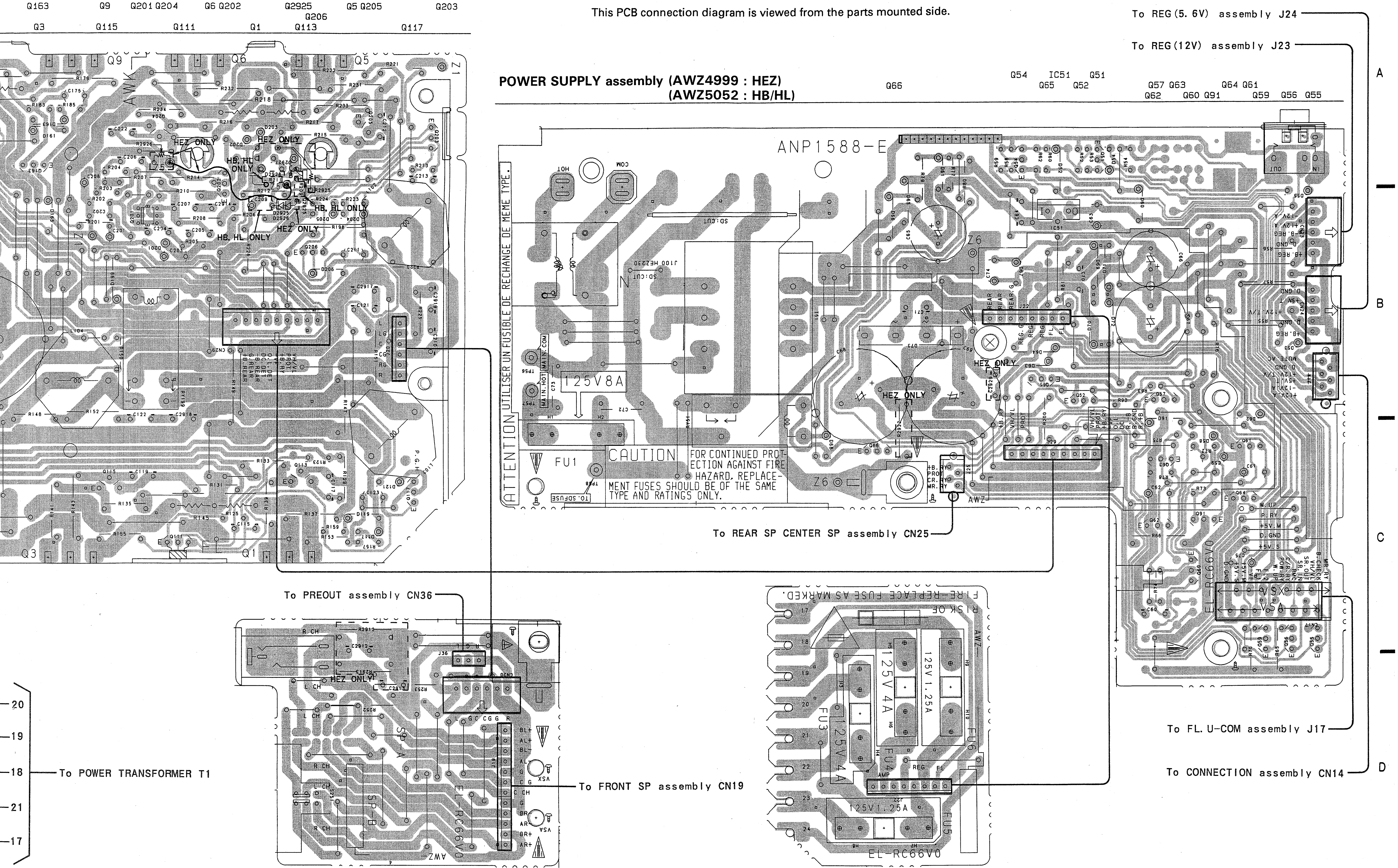

5
6
7
8
9
L
A
B
C
D
E
F
SCH−8
To PREOUT assembly CN36 (➡ SCH−2)
SP SW assembly (AWZ4535 : HEZ) (AWZ4289 : HB/HL)
HEAD PHONE
HEADPHONE
HEZ ONLY
AC 2CH
AC 3CH
GND
L CH OUT
L/R RETURN
C CH OUT
C CH RETURN
R CH OUT
B+/L
A+/L
B−/L
A−/L
B−/R
A−/R
B+/R
A+/R
To FRONT SP assembly CN19 (➡ SCH−9)
REAR R CH
REAR RETURN
REAR L CH
To REAR SP CENTER SP assembly CN21 (➡ SCH−9)
⚠ T1 POWER TRANSFORMER ATS1435
C10−C12: 0.1/250
HB
HEZ, HL
240V
230V
VH/VL
PROT
+B RY
−V FDP
OVER LOAD
DC PROTECT
−B REAR
REAR RETURN
+B REAR
To REAR SP CENTER SP assembly CN25 (➡ SCH−9)
C/R RY
MR RY
+B.RY
19.0V
OPEN +31 LOAD +24.7
OPEN −31 LOAD −24.8
POWER SUPPLY assembly (AWZ4999 : HEZ) (AWZ5052 : HB/HL)
Q52, 57, 91 : RELAY DRIVE
Q60 : PROTECTION TRIGEER
Q62, 63 : DC DET.
Q61, 64 : PRIMARY DET.
Q56, 59 : LEVEL SHIFT
Q65 : VH/VL RELAY DRIVE
13.2V
13.8V
0.6V
1.2V
21.5mA
To CONNECTION assembly CN14 (➡ SCH−7)
MUTE.AC
+12V AUDIO
−12V AUDIO
+5V TUNER
+12V VIDEO
D.G
To REG (5.6V) assembly J24 (➡ SCH−7)
+B REG
+12V T/V
+5V
To REG (12V) assembly J23 (➡ SCH−7)
−B REG
TRANS TERMINAL assembly (AWZ4268)
+B REAR
−B REAR
GND
FL
Q66 : AC RELAY DRIVE
IC51 : REGULATOR
5.5
12.7
Q51 : REGULATOR
5.0
Q54 : SR
IN OUT
SR RMC
RMC MR CHECK
MR RY
SCH−6)
MAIN HOT
MAIN COM
COM
HOT
⚠ AC POWER CORD ADG1049 : HEZ, HL ADG1118 : HB AC220−230V/240V 50/60Hz
FU1, 3, 4 : AEK−512 (T2.5A/250V)
FU5, 6 : AEK−509 (T1.25A/250V)
AUDIO SIGNAL ROUTE
⇨ : FRONT Lch
➡ : REAR Lch
▲ : CENTER

AMP assembly,
POWER SUPPLY assembly,
SP SW assembly,
TRANS TERMINAL assembly

SCH−8

This PCB connection diagram is viewed from the parts mounted side.

POWER SUPPLY assembly (AWZ4999 : HEZ)
(AWZ5052 : HB/HL)

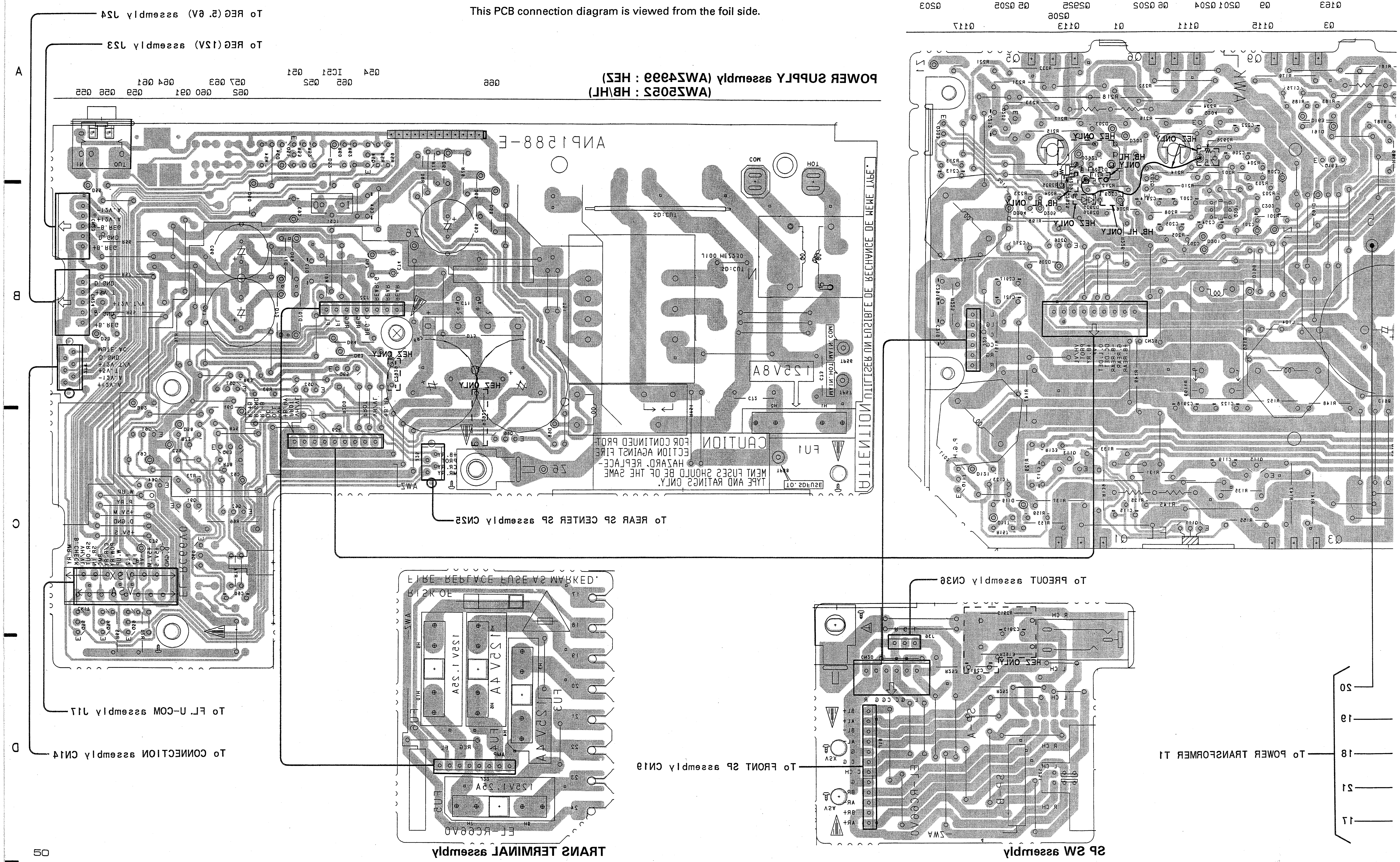

Q163
Q9
Q201 Q204
Q6 Q202
Q2925
Q206
Q5 Q205
Q203
Q3
Q115
Q111
Q1
Q113
Q117
Q54
IC51
Q51
Q66
Q65
Q52
Q57 Q63
Q64 Q61
Q62
Q60 Q91
Q59
Q56
Q55
A
B
C
D
To REG (5.6V) assembly J24
To REG (12V) assembly J23
To REAR SP CENTER SP assembly CN25
To PREOUT assembly CN36
To POWER TRANSFORMER T1
To FRONT SP assembly CN19
To FL. U-COM assembly J17
To CONNECTION assembly CN14
20
19
18
21
17
ANP1588-E
HEZ ONLY
HB, HL ONLY
AWK
HOT
COM
125V8A
FU1
ATTENTION UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE.
CAUTION FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
SD:CUT
Z6
AWZ
EL-RC66V0
VSA
FIRE-REPLACE FUSE AS MARKED.
RISK OF
125V 4A
125V 1.25A
FU3
FU4
FU5
FU6
REG
FL
AMP
SP-A
SP-B
R CH
L CH
J36
CN20

SP SW assembly

TRANS TERMINAL assembly

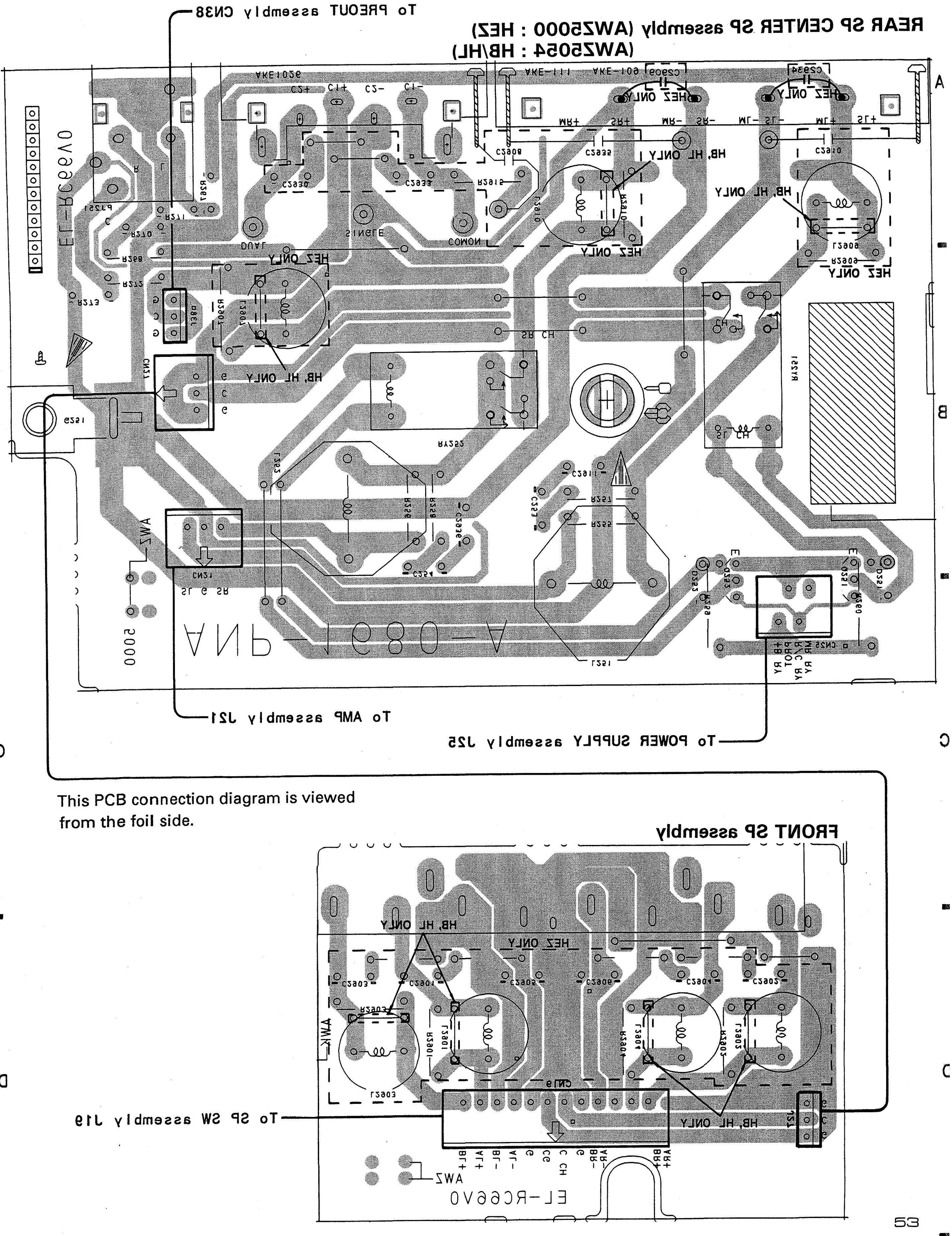
This PCB connection diagram is viewed from the foil side.

POWER SUPPLY assembly (AWZ4999 : HEZ)
(AWZ5052 : HB/HL)


To REG(5.6V) assembly J24
To REG(12V) assembly J23
To REAR SP CENTER SP assembly CN25
To FL U-COM assembly J17
To CONNECTION assembly CN14
To FRONT SP assembly CN19
To PREOUT assembly CN36
To POWER TRANSFORMER T1
CN21
20
19
18
21
17
ANP1588-E
HEZ ONLY
HB, HL ONLY
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY.
ATTENTION UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE.
RISK OF FIRE-REPLACE FUSE AS MARKED.
T2.5A
T1.25A
125V1.25A
125V4A
125V8A
FU1
FU2
FU3
FU4
EL-RC6600
TRANS TERMINAL assembly
SP SW assembly
Q1 Q3 Q5 Q6 Q9
Q111 Q113 Q115 Q117
Q163 Q201 Q202 Q203 Q204 Q205 Q206
IC51 Q51 Q52 Q54 Q55 Q56 Q57 Q59 Q60 Q61 Q62 Q63 Q64 Q65 Q66 Q91

4.9 FRONT SP ASSEMBLY AND REAR SP CENTER SP ASSEMBLY

REAR SP CENTER SP assembly (AWZ5000 : HEZ)
(AWZ5054 : HB/HL)

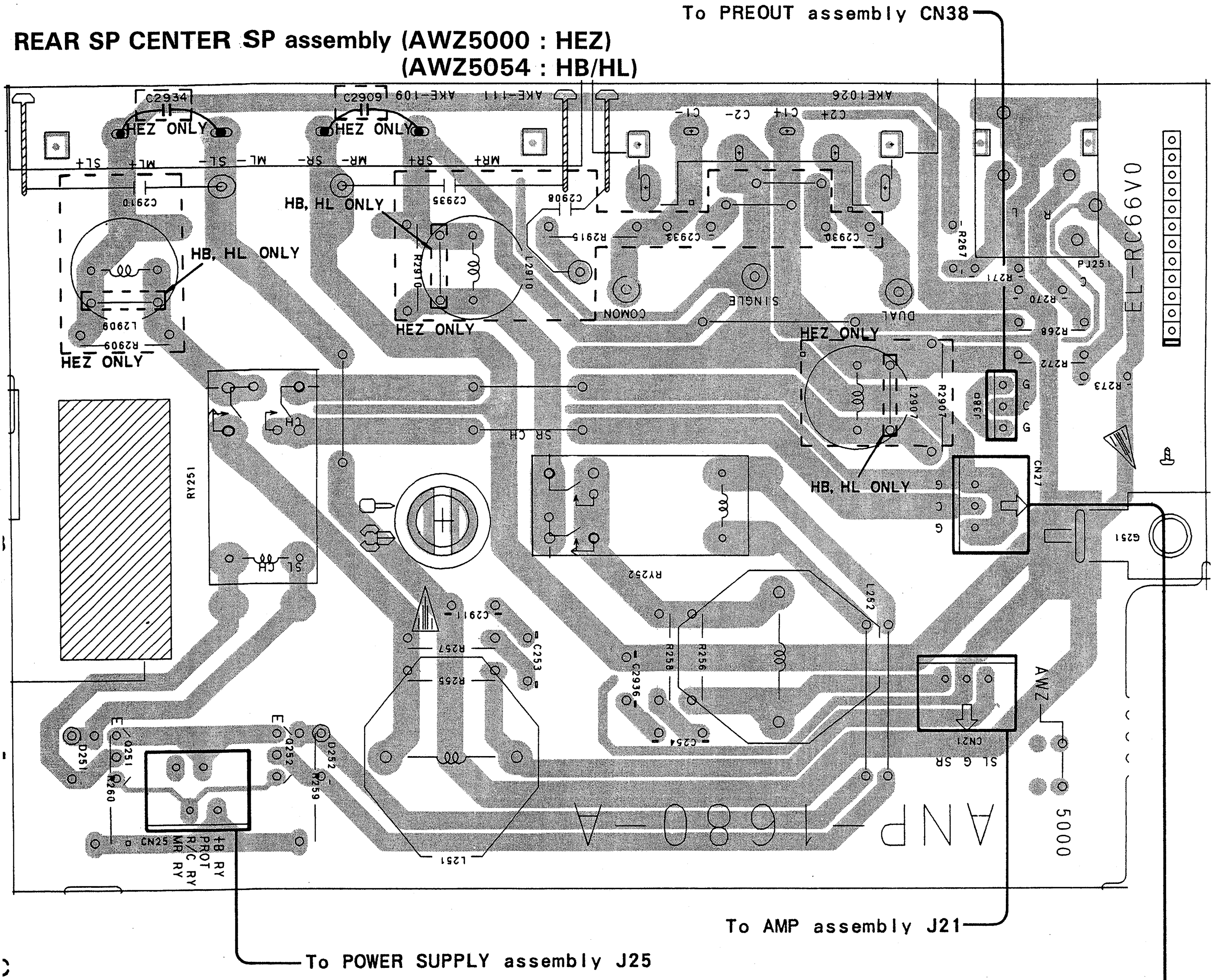

To PREOUT assembly CN38
To AMP assembly J21
To POWER SUPPLY assembly J25
To SP SW assembly J19
HEZ ONLY
HB, HL ONLY
ANP-1080-A
EL-RC66V0
A
B
C
D
1
2
3

This PCB connection diagram is viewed from the foil side.

FRONT SP assembly

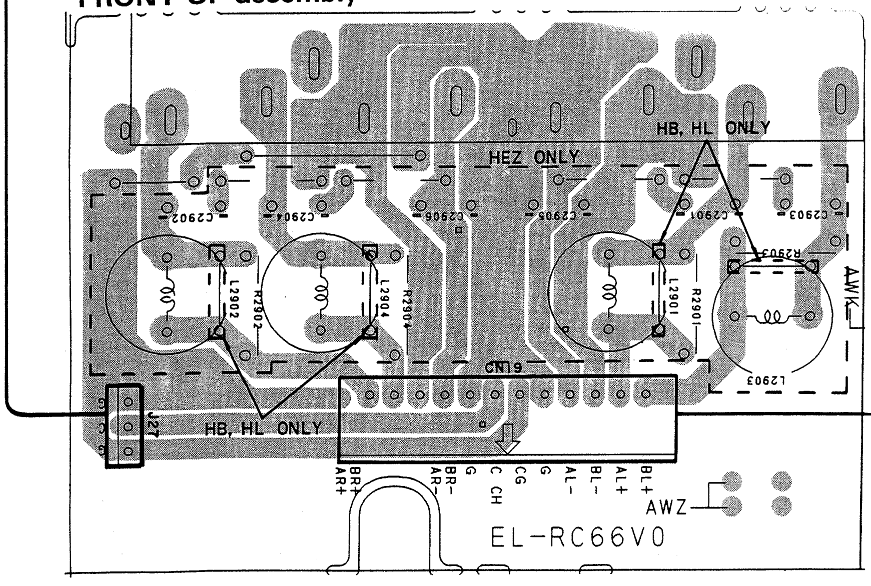
4.9 FRONT SP ASSEMBLY AND REAR SP CENTER SP ASSEMBLY

REAR SP CENTER SP assembly (AWZ5000 : HEZ)
(AWZ5054 : HB/HL)

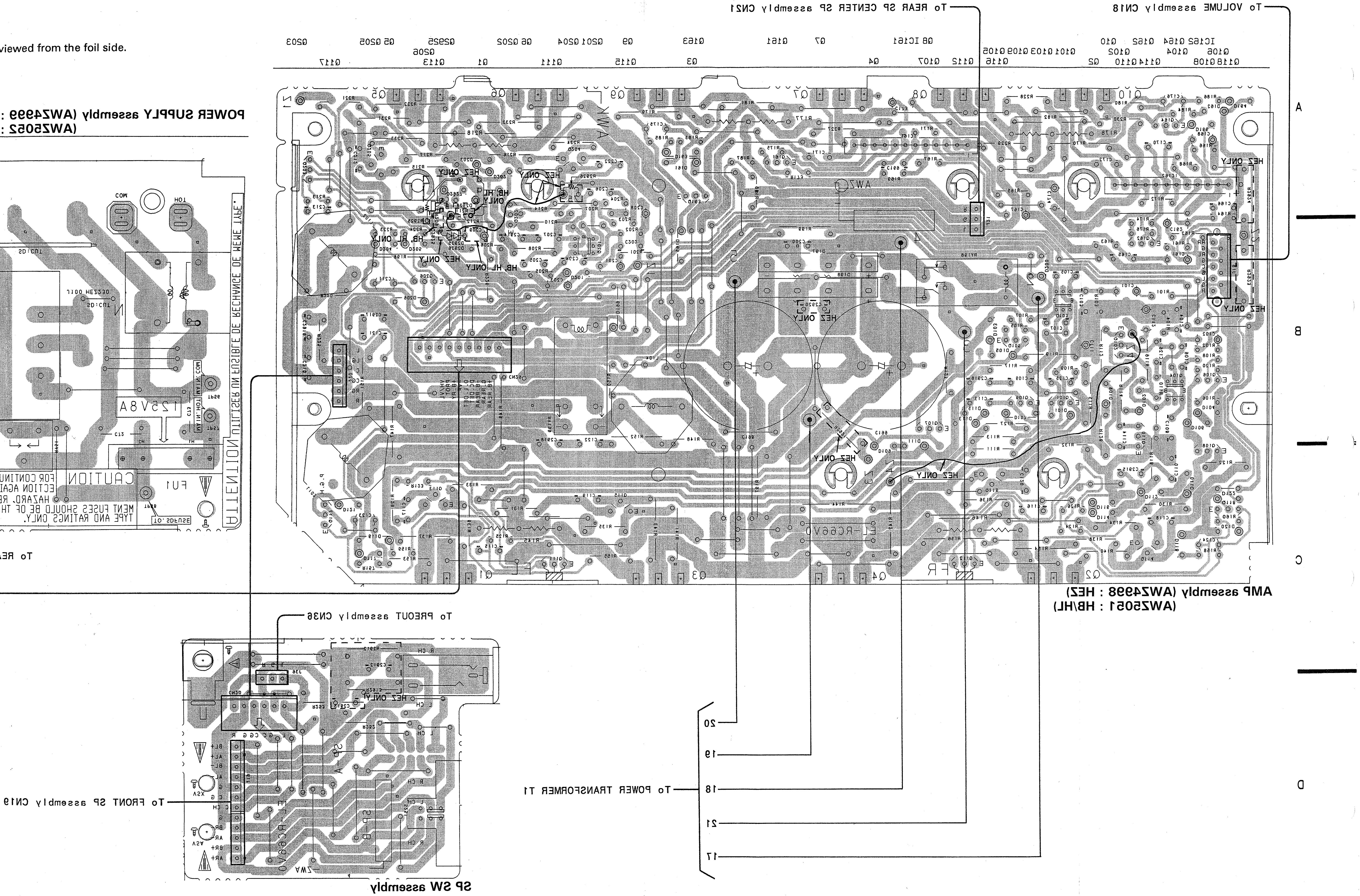

To PREOUT assembly CN38
A
B
C
C2934
C2909
HEZ ONLY
AKE-109
AKE-111
AKE1026
SL+
ML+
SL-
ML-
SR-
MR-
SR+
MR+
C1-
C2-
C1+
C2+
C2910
C2935
C2908
C2933
C2930
HB, HL ONLY
R2915
R2910
L2910
L2909
R2909
R2267
R271
PJ251
R270
R268
R272
R273
COMON
SINGLE
DUAL
L2907
R2907
CN38
G
C
G
CN27
EL-RC66V0
RY251
SR CH
SL CH
RY252
G251
C2911
R257
C253
R255
R258
R256
C2936
C254
L252
L251
CN21
SL G SR
AWZ
5000
ANP-1680-A
Q251
Q252
D251
D252
R260
R259
CN25
+B RY
PROT
R/C RY
MP RY
To AMP assembly J21
To POWER SUPPLY assembly J25

This PCB connection diagram is viewed from the parts mounted side.

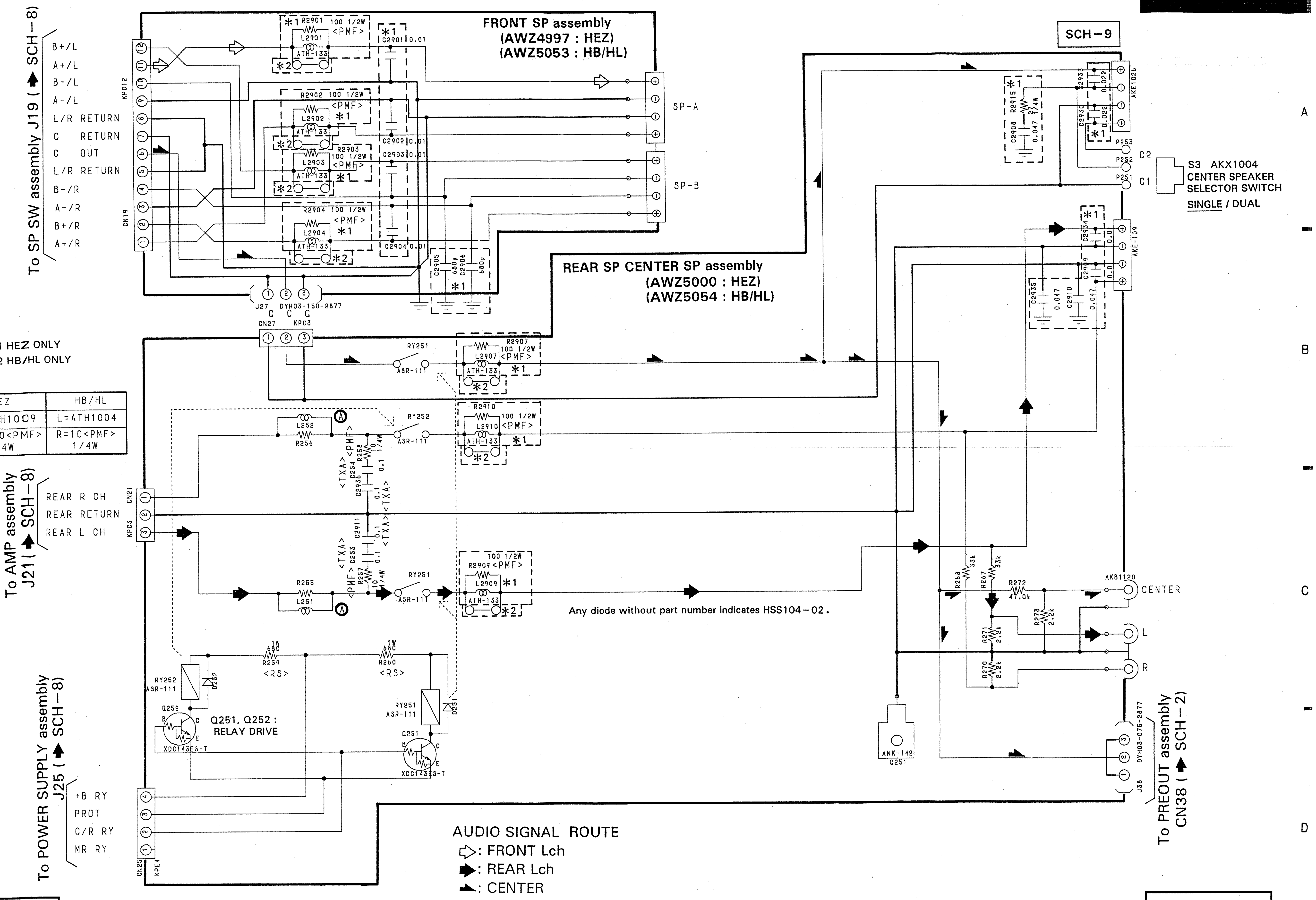
FRONT SP assembly


HB, HL ONLY
HEZ ONLY
C2902
C2904
C2906
C2905
C2901
C2903
L2902
R2902
L2904
R2904
L2901
R2901
R2903
L2903
AWK
CN19
J27
HB, HL ONLY
BR+
AR+
BR-
AR-
G
C CH
CG
G
AL-
BL-
AL+
BL+
AWZ
EL-RC66V0
To SP SW assembly J19

viewed from the foil side.


POWER SUPPLY assembly (AWZ4999 :
(AWZ5052 :
AMP assembly (AWZ4998 : HEZ)
(AWZ5051 : HB/HL)
SP SW assembly
To REAR SP CENTER SP assembly CN21
To VOLUME assembly CN18
To PREOUT assembly CN36
To FRONT SP assembly CN19
To POWER TRANSFORMER T1
20
19
18
21
17
HEZ ONLY
HB, HL ONLY
CAUTION
FU1
ATTENTION
A
B
C
D
6
5
4
3
2
1

SCH-9


FRONT SP assembly
(AWZ4997 : HEZ)
(AWZ5053 : HB/HL)
REAR SP CENTER SP assembly
(AWZ5000 : HEZ)
(AWZ5054 : HB/HL)
To SP SW assembly J19 (➡ SCH-8)
B+/L
A+/L
B-/L
A-/L
L/R RETURN
C RETURN
C OUT
L/R RETURN
B-/R
A-/R
B+/R
A+/R
KPC12
CN19
R2901 100 1/2W <PMF>
L2901
ATH-133
R2902 100 1/2W <PMF>
L2902
R2903 100 1/2W <PMF>
L2903
R2904 100 1/2W <PMF>
L2904
C2901 0.01
C2902 0.01
C2903 0.01
C2904 0.01
C2905 680p
C2906 680p
SP-A
SP-B
J27 DYH03-150-2877
G C G
CN27 KPC3
RY251
ASR-111
R2907 100 1/2W <PMF>
L2907
RY252
R2910 100 1/2W <PMF>
L2910
L252
R256
R258 10 1/4W <PMF>
C254 <TXA>
C2936 0.1
C2911 0.1 <TXA>
C253 <TXA>
R257 10 1/4W <PMF>
R255
L251
R2909 100 1/2W <PMF>
L2909
To AMP assembly J21 (➡ SCH-8)
REAR R CH
REAR RETURN
REAR L CH
CN21
KPC3
R259 1W 68Ω <RS>
R260 1W 68Ω <RS>
RY252 ASR-111
D252
Q252
XDC143ES-T
Q251, Q252 : RELAY DRIVE
RY251 ASR-111
D251
Q251
XDC143ES-T
To POWER SUPPLY assembly J25 (➡ SCH-8)
+B RY
PROT
C/R RY
MR RY
CN25 KPE4
SCH-9
R2915 2.2 1/4W
C2908 0.047
C2933 0.022
C2932 0.022
AKE1026
P253
P252 C2
P251 C1
S3 AKX1004
CENTER SPEAKER
SELECTOR SWITCH
SINGLE / DUAL
C2934 0.01
C2939 0.01
C2935 0.047
C2910 0.047
AKE-109
R268 33k
R267 33k
R272 47.0k
R273 2.2k
R271 2.2k
R270 2.2k
AKB1120
CENTER
L
R
ANK-142
G251
J38 DYH03-075-2877
To PREOUT assembly CN38 (➡ SCH-2)
Ⓐ

*1 HEZ ONLY
*2 HB/HL ONLY

Ⓐ

HEZ	HB/HL
L=ATH1009	L=ATH1004
R=100<PMF> 1/4W	R=10<PMF> 1/4W

Any diode without part number indicates HSS104-02.

AUDIO SIGNAL ROUTE
⇨: FRONT Lch
➡: REAR Lch
▲: CENTER

5. PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 ························ RD1/8PM $\boxed{5}\,\boxed{6}\,\boxed{1}$ J
47kΩ → 47 × 10^3 → 473 ························ RD1/4PS $\boxed{4}\,\boxed{7}\,\boxed{3}$ J
0.5Ω → 0R5 ·· RN2H $\boxed{0}\,\boxed{R}\,\boxed{5}$ K
1Ω → 010 ·· RS1P $\boxed{0}\,\boxed{1}\,\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62kΩ → 562 × 10^1 → 5621 ················· RM1/4PC $\boxed{5}\,\boxed{6}\,\boxed{2}\,\boxed{1}$ F

LIST OF ASSEMBLIES

Mark	No.	Description	Parts No.
NSP		DSP ASSEMBLY	AWK1553
◉		└─ DSP ASSEMBLY	AWZ4294
NSP		SMALL SIGNAL ASSEMBLY	AWK1727
NSP		├─ REG (12V) ASSEMBLY	AWZ4266
NSP		├─ REG (5.6V) ASSEMBLY	AWZ4267
		├─ CONNECTION ASSEMBLY	AWZ4385
NSP		├─ PREOUT ASSEMBLY	AWZ4386
		├─ AUDIO FUNCTION ASSEMBLY	AWZ5001
		├─ A/V FUNCTION ASSEMBLY	AWZ5002
		└─ VOLUME ASSEMBLY	AWZ5004
NSP		POWER AMP ASSEMBLY	AWK1728
NSP		├─ TRANS TERMINAL ASSEMBLY	AWZ4268
NSP		├─ SP SW ASSEMBLY	AWZ4535
		├─ AMP ASSEMBLY	AWZ4998
		└─ POWER SUPPLY ASSEMBLY	AWZ4999
		FL.U−COM ASSEMBLY	AWK1729
NSP		SP ASSEMBLY	AWK1730
NSP		├─ FRONT SP ASSEMBLY	AWZ4997
		└─ REAR SP CENTER SP ASSEMBLY	AWZ5000
		S TERM ASSEMBLY	AWQ1017

FL.U−COM ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC601		PDG084D
	Q601−Q604		2SC2458
	Q606−Q610		XDC124ES
	D604		AEL1151
	D601−D603, D607−D625, D628		HSS104−02

SWITCHES

Mark	No.	Description	Parts No.
	S601,S603, S605, S609, S614, S617, S618, S621, S622, S625, S626, S629, S630, S634, S637, S638, S641, S642, S644−S646, S648−S650, S652, S654, S656−S660		ASG1034

COIL

Mark	No.	Description	Parts No.
	F601		ATF1108

CAPACITORS

Mark	No.	Description	Parts No.
	C601		ACH1135
	C606		CEAS010M50
	C602		CEAS100M50
	C605		CEAS101M10
	C608, C621		CEJA100M50
	C604		CKDYX104M25
	C3000−C3003		CKPUYB681K50
	C607		CKPUYF223Z25
	C603, C609, C610, C620		CKPUYF473Z16

RESISTORS

Mark	No.	Description	Parts No.
		All Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	X602	(8.00MHZ)	ASS1015
		PIN JACK (1P)	AKB1082
		MINI DIN SOCKET (4P)	AKP1067
	V601	FL TUBE	AAV1146
		FL SPACER	AEB1120
	X601	REMOTE RECEIVER UNIT	AXX1033

S TERM ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC951, IC952		LA7951
	Q951, Q952		2SC2458
	D951, D952, D954−D957		HSS104−02
	D953		RD5.6ESB

COILS

Mark	No.	Description	Parts No.
	L951−L954		LAU820K

CAPACITORS

Mark	No.	Description	Parts No.
	C972, C973		CEANP010M50
	C951, C952, C985, C987, C989, C990−C992		CEAS100M50
	C964, C965		CEAS101M25
	C956, C966, C969, C970		CEAS470M25
	C971, C974		CEAS471M10
	C968		CKDYF103Z50
	C958, C959, C967		CKPUYF103Z25

RESISTORS

Mark	No.	Description	Parts No.
	R964, R967		RD1/2PM151J
	R989		RD1/2PMF561J
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		2 SERIAL 4P MINI DIN SOCKET	AKP1064
	CN951	JUMPER CONNECTOR (6P)	KPE6

REG (12V) ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC54		NJM78M12FAS
	IC55		NJM79M12FA

CAPACITORS

Mark	No.	Description	Parts No.
	C52, C53		CEAS101M35
	C56, C57		CKCYF103Z50

REG (5.6V) ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC52		M5237L
	IC53		NJM78M56FAS
	Q51		2SA1306

CAPACITORS

Mark	No.	Description	Parts No.
	C76		CEAS010M50
	C55		CEAS101M35
	C51		CEAS470M16
	C54		CKCYF103Z50
	C58		CKCYX104M25

RESISTORS

Mark	No.	Description	Parts No.
	R84		RD1/4PM363J
	R83		RD1/4PMF221J
	R51		RS1LMF100J
		Other Resistors	RD1/8PM□□□J

TRANS TERMINAL ASSEMBLY

TRANS TERMINAL assembly has no service parts.

DSP ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC1302		LH5P832N−10T
	IC1202, IC1204, IC1206, IC1209		M5238PF
	IC1201, IC1203, IC1205, IC1207, IC1208		NJM4558DXP
	IC1303		NJM78M05FAS
	IC1210		TC9162N
	IC1301		YSS215
	D1271−D1275, D1301−D1305		HSS104−02

COILS

Mark	No.	Description	Parts No.
	F1201, F1202		ATF1071
	F1301, F1302		ATF1102
	L1301−L1305		ATX1008

CAPACITORS

Mark	No.	Description	Parts No.
	C1203, C1204, C1233, C1234, C1237, C1238, C1252, C1256		CCSQCH101J50
	C1305, C1306		CCSQCH300J50
	C1211, C1212, C1221, C1222		CCSQCH330J50
	C1215, C1216, C1225, C1226		CCSQCH391J50
	C1255		CEANP2R2M50
	C1201, C1202, C1205, C1206, C1219, C1220, C1229, C1230, C1232, C1271, C1272		CEAS100M50
	C1273		CEAS101M10
	C1317, C1318		CEAS101M16
	C1236, C1239, C1240, C1257		CEAS220M25
	C1312		CEAS221M10
	C1273		CEAS331M6
	C1301, C1309		CEAS470M10
	C1319, C1321		CEAS470M16
	C1307		CEAS4R7M50
	C1231, C1251		CEJA100M35
	C1235, C1253		CEJA220M25
	C1254		CFTXA274J50
	C1338		CKDYB561K50
	C1302, C1311, C1314, C1323		CKSQYB102K50
	C1213, C1214, C1223, C1224		CKSQYB272K50
	C1217, C1218, C1227, C1228		CKSQYB682K50
	C1324, C1325		CKSQYF103Z50
	C1274, C1308		CKSQYF104Z50
	C1303, C1310, C1313, C1320, C1322, C1326−C1330, C1332−C1337		CKSQYF473Z50
	C1315, C1316		CQSA332J50

Mark	No.	Description	Parts No.

RESISTORS

	R1307		RD1/2PMF100J
	R1321−R1331		RS1/10S000J
	R1227, R1228, R1243, R1244, R1261, R1271, R1272, R1302		RS1/10S101J
	R1235−R1242, R1304−R1306		RS1/10S102J
	R1231−R1234, R1251, R1252, R1254, R1256−R1260, R1273, R1274, R1303, R1311, R1312		RS1/10S103J
	R1201, R1202, R1245, R1246, R1255		RS1/10S104J
	R1301		RS1/10S105J
	R1253		RS1/10S152J
	R1275		RS1/10S200J
	R1203−R1206		RS1/10S332J
	R1207, R1208		RS1/10S682J
	R1211−R1216, R1221−R1226		RS1/10S822J
		Other Resistors	RD1/8PM□□□J

OTHERS

	X1301 (11.2MHz)		ASS1031

CONNECTION ASSEMBLY

SEMICONDUCTORS

	IC304		M5220P

CAPACITORS

	C325, C326		CCSQCH331J50
	C323, C324		CEAS101M25
	C315		CEAS470M16
	C321, C322		CEAS4R7M50
	C318		CKSQYF473Z50

RESISTORS

	R353, R354		RS1/10S102J
	R347−R350		RS1/10S104J
	R345, R346		RS1/10S153J
	R351, R352		RS1/10S472J
	R343, R344		RS1/10S682J

OTHERS

	CN14	JUMPER CONNECTOR (6P)	KPE6
	CN15	JUMPER CONNECTOR (9P)	KPE9

PREOUT ASSEMBLY

CAPACITORS

	C591		CFTXA824J50

RESISTORS

		All Resistors	RD1/8PM□□□J

OTHERS

	CN	PIN JACK (1P)	AKB1139
	CN	PIN JACK (2P)	AKB1171

Mark	No.	Description	Parts No.

SP SW ASSEMBLY

SWITCH

	S251		SUJ6LYXS

CAPACITORS

	C2912, C2913		CKCYB392K50

RESISTORS

	R2912, R2913		RS1LMF681J
	R252, R253		RS2LMF331J

OTHERS

		HEADPHONE JACK	AKN1002
	CN20	JUMPER CONNECTOR (6P)	KPC6

FRONT SP ASSEMBLY

COILS

	L2901−L2904		ATH−133

CAPACITORS

	C2905, C2906		CKCYB681K50
	C2901−C2904		CKCYF103Z50

RESISTORS

	R2901−R2904		RD1/2PMF101J

OTHERS

		SPEAKER TERMINAL 8−P	AKE1011
	CN19	JUMPER CONNECTOR (12P)	KPC12

AMP ASSEMBLY

SEMICONDUCTORS

	IC161, IC162		UPC1270H
	Q107, Q108, Q2925		2SA1145
	Q103, Q104, Q201		2SA1240
	Q115, Q116, Q204		2SA1306
	Q105, Q106		2SA970
	Q101, Q102		2SC1845
	Q117, Q118, Q206		2SC2240
	Q161−Q164		2SC2458
	Q111, Q112, Q203		2SC2603
	Q109, Q110, Q202		2SC2705
	Q113, Q114, Q205		2SC3298
	D197, D198		D5SB20F
	D101−D108, D111−D114, D117−D122, D161−D166, D199, D200, D204−D206, D2925, D2926		HSS104−02
	D109, D110, D115, D116, D201		RD10ESB
	D202, D203, D2927, D2928		RD4.3ESB

RELAIES

	RY199		ASR−112
	RY198		ASR1035

Mark	No.	Description	Parts No.
COILS			
	L102−L104		ATH1009
CAPACITORS			
	C200, C2920	(0.01/AC150V)	ACG1005
	C198	(8200/DC71V)	ACH1224
	C199	(8200/DC71V)	ACH1225
	C113, C114		CCCSL050C500
	C105−C108		CCCSL101J50
	C212, C222		CCCSL101K500
	C207, C2914		CCCSL121K500
	C117−C120		CCCSL151K500
	C109, C110, C2915, C2916		CCCSL470K500
	C169, C170		CCCSL680J50
	C123, C124		CEANP010M100
	C175, C176, C211		CEANP2R2M50
	C173, C174		CEAS100M100
	C201, C203		CEAS2R2M50
	C111, C112, C208		CEAS470M16
	C101, C102		CEAS4R7M50
	C167, C168		CEHAQ101M10
	C161, C162		CEHAQ2R2M50
	C121, C122, C210, C2917−C2919		CFTXA104J50
	C115, C116, C204−C206, C213		CKCYB102K50
	C103, C104, C202		CKCYB122K50
	C165, C166		CKCYB222K50
	C125, C126		CKCYB472K50
	C171, C172		CKCYX333M25
RESISTORS			
	R177, R178	(0.22/2W)	ACN−131
	R145, R146, R218	(0.33/5W)	ACN1087
	R208		RD1/4PM123J
	R115, R116		RD1/4PM152J
	R207		RD1/4PM431J
	R117, R118		RD1/4PM473J
	R225		RD1/4PMF100J
	R147, R148, R220		RD1/4PMF101J
	R153−R156, R179−R182, R221, R222		RD1/4PMF222J
	R139−R142, R233, R234		RD1/4PMF4R7J
	R121, R122, R2925		RD1/4PMF680J
	R129−R136, R214−R217		RD1/4PMFL101J
	R210		RD1/4PMFL470J
	R111−R114		RFA1/4PS391J
	R127, R128		RFA1/4PS470J
	R137, R138, R143, R144, R227−R232		RFA1/4PS4R7J
	R151, R152, R2921, R2923, R2924		RS1LMF100J
	R198, R199		RS1PMF681J
	R197		RS2LMF103J
		Other Resistors	RD1/8PM□□□J
OTHERS			
	CN29	JUMPER CONNECTOR (9P)	KPC9
		EARTH READ	ADB1011
		SCREW	ABA1009

Mark	No.	Description	Parts No.
POWER SUPPLY ASSEMBLY			
SEMICONDUCTORS			
	IC51		NJM78M56FAS
	Q54−Q57, Q59		2SA1048
	Q60		2SA1145
	Q51, Q52, Q62, Q63, Q91		2SC2458
	Q64		XDC124ES
	Q61, Q65, Q66		XDC143ES
	D73		D3SBA20 (A)
	D52−D55, D60, D68, D91		HSS104−02
	D61		HZS6A1L
	D58		RD5.1ESB
	D62		RD6.2ESB
	D67		RD8.2ESB
	D63−D66, D69, D70−D72		S5566
RELAY			
	RY51		ASR1027
COIL & TRANSFORMER			
	L51		ATF1006
	T51		ATT1015
CAPACITORS			
⚠	C72, C73	(0.01/AC400V)	ACG1002
	C71	(0.01/AC150V)	ACG1005
	C68, C69	(4700/DC35V)	ACH1021
	C61		CEAS100M50
	C75		CEAS101M35
	C65		CEAS102M25
	C66		CEAS102M35
	C59, C62		CEAS221M16
	C67		CEAS222M35
	C74		CEAS470M10
	C63		CEAS470M16
	C60, C64, C70		CKCYB103K50
	C2929		CKDYB102K50
RESISTORS			
	R66		RD1/2PM132J
	R200		RD1/2PM432J
	R79		RD1/4PM332J
	R75		RD1/4PMF101J
	R80		RD1/4PMF4R7J
	R81		RD1/4PMFL470J
	R2922		RS1LMF100J
	R56, R57		RS1LMFR22J
	R55		RS2LMFR22J
		Other Resistors	RD1/8PM□□□J
OTHERS			
		MINI JACK (2P)	AKN1006
	CN17	JUMPER CONNECTOR (13P)	KPE13

REAR SP CENTER SP ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	Q251, Q252		XDC143ES
	D251, D252		HSS104−02

RELAIES

Mark	No.	Description	Parts No.
	RY251, RY252		ASR−111

COILS

Mark	No.	Description	Parts No.
	L2907, L2909, L2910		ATH−133
	L251, L252		ATH1009

CAPACITORS

Mark	No.	Description	Parts No.
	C253, C254, C2911, C2936		CFTXA104J50
	C2930, C2933		CKCYF223Z50
	C2909, C2934		CKDYF103Z50
	C2908		CKDYF473Z50
	C2910, C2935		CKDYX104M25

RESISTORS

Mark	No.	Description	Parts No.
	R2907, R2909, R2910		RD1/2PMF101J
	R257, R258		RD1/4PMF100J
	R255, R256		RD1/4PMF101J
	R2915		RD1/4PMF270J
	R259, R260		RS1LMF681J
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
		PIN JACK (3P)	AKB1120
		SPEAKER TERMINAL 4−P	AKE−109
		SPEAKER TERMINAL 4−P	AKE1026
	CN25	JUMPER CONNECTOR (4P)	KPE4

AUDIO FUNCTION ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC801		M5220P
	IC803		NJM4558DXP
	IC802		TC9164N

CAPACITORS

Mark	No.	Description	Parts No.
	C847		CCSQCH471J50
	C805, C806		CCSQCH561J50
	C2963, C2964, C2969, C2970		CCSQSL101J50
	C807, C808		CCSQSL821J50
	C801, C802		CEAS100M50
	C819, C820		CEAS101M16
	C815, C816, C841, C842		CEAS2R2M50
	C809, C810		CEAS471M6
	C845, C846		CEAS4R7M50
	C2951−C2962, C2965−C2968, C2996, C2997		CKSQYB681K50
	C817, C818, C843, C844		CKSQYF103Z50
	C811, C712		CQMA243J50
	C813, C814		CQMA823J50

RESISTORS

Mark	No.	Description	Parts No.
	R847−R849		RS1/10S102J
	R839−R842		RS1/10S104J
	R829, R830, R837, R838		RS1/10S222J
	R815, R816, R845, R846		RS1/10S224J
	R809, R810		RS1/10S302J
	R803, R804, R819, R820, R823, R824, R827, R828, R835, R836		RS1/10S331J
	R811, R812		RS1/10S393J
	R813, R814		RS1/10S471J
	R801, R802, R817, R818, R821, R822, R825, R826, R831−R834		RS1/10S474J
	R805, R806		RS1/10S563J
	R807, R808		RS1/10S680J

OTHERS

Mark	No.	Description	Parts No.
		PIN JACK (6P)	AKB1140
	CN	PIN JACK (4P)	AKB1181
	CN	PIN JACK (4P)	AKB1201
	CN11	JUMPER CONNECTOR (7P)	KPE7

A/V FUNCTION ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC881		LA7951
	IC882		NJM2233BS
	IC851		TC9163N
	Q881, Q882		2SC2458
	D851, D852		1SS352

CAPACITORS

Mark	No.	Description	Parts No.
	C873		CCSQCH471J50
	C2983, C2984, C2989, C2990		CCSQSL101J50
	C886, C891, C896, C897		CEAS101M16
	C881−C885, C892, C893		CEAS470M16
	C888−C890		CEAS471M6
	C871, C872, C887, C898−C900		CKSQYB103K50
	C2971−C2982, C2985−C2988		CKSQYB681K50

RESISTORS

Mark	No.	Description	Parts No.
	R890, R894		RD1/2PM151J
	R904, R905, R907−R911		RS1/10S000J
	R901, R902		RS1/10S101J
	R875−R877, R885−R887, R898		RS1/10S102J
	R888, R892, R896		RS1/10S103J
	R891, R895		RS1/10S122J
	R903, R906		RS1/10S151J
	R863, R864, R871, R872		RS1/10S222J
	R853, R854, R857, R858, R861, R862, R869, R870		RS1/10S331J

Mark	No.	Description	Parts No.
	R851, R852, R855, R856, R859, R860, R865−R868, R873, R874		RS1/10S474J
	R889, R893, R897		RS1/10S680J
	R881−R884		RS1/10S750J

OTHERS

Mark	No.	Description	Parts No.
		PIN JACK (3P)	AKB1102
		PIN JACK (1P)	AKB1145

VOLUME ASSEMBLY

SEMICONDUCTORS

Mark	No.	Description	Parts No.
	IC561, IC564		M5220L
	IC501, IC521, IC523		NJM4558DXP
	IC524		NJM4558LD
	IC503		TA8409S
	IC522, IC525, IC562		TC9154AP
	IC563		TC9184P
	Q501		XDC124ES
	D521−D526, D561−D566		HSS104−02
	D506		RD3.3ESB2
	D501, D502		RD5.1ESB2

CAPACITORS

Mark	No.	Description	Parts No.
	C567, C568		CCSQCH121J50
	C2991−C2994, C2998		CCSQCH151J50
	C507, C508, C559, C560		CCSQCH331J50
	C525, C526, C535, C536, C542, C549		CCSQCH470J50
	C511		CEANP101M10
	C565, C566		CEAS010M50
	C569, C570		CEAS100M50
	C512		CEAS101M16
	C561, C562		CEAS2R2M50
	C501, C502		CEAS470M10
	C503, C504, C509, C510, C521, C522, C527, C528, C531, C532, C540, C543, C547, C550−C552, C579, C580		CEAS4R7M50
	C585, C2999		CKSQYB102K50
	C505, C506, C523, C524, C533, C534, C541, C544, C545, C548		CKSQYB103K50
	C539, C546		CKSQYB471K50
	C563, C564, C581, C582, C586, C587		CKSQYF103Z50
	C571, C572, C577, C578		CQMA153J50
	C575, C576		CQMA272J50
	C573, C574		CQMA823J50

RESISTORS

Mark	No.	Description	Parts No.
	VR501 (100k A5×2)		ACX1075
	R517		RD1/2PM470J
	R501, R502		RD1/4PM681J
	R599		RS1/10S000J
	R527, R528, R537−R539, R543, R547−R549, R561, R562, R569, R570, R585−R590, R2943, R2944		RS1/10S102J
	R525, R526, R542		RS1/10S103J
	R567, R568		RS1/10S104J
	R505, R506		RS1/10S112J
	R583, R584		RS1/10S154J
	R559, R560, R2946, R2948, R2950		RS1/10S222J
	R577, R578		RS1/10S223J
	R529, R530, R544		RS1/10S224J
	R523, R524, R541		RS1/10S332J
	R571, R572		RS1/10S362J
	R531, R532, R545, R579, R580		RS1/10S392J
	R503, R504, R521, R522, R540, R563, R564		RS1/10S473J
	R565, R566		RS1/10S474J
	R508		RS1/10S561J
	R518, R519		RS1/10S562J
	R575, R576		RS1/10S564J
	R533, R534, R546		RS1/10S623J
	R581, R582		RS1/10S821J
	R573, R574		RS1/10S823J
		Other Resistors	RD1/8PM□□□J

OTHERS

Mark	No.	Description	Parts No.
	CN16, CN18	JUMPER CONNECTOR (9P)	KPE9

6. REMOTE CONTROL UNIT [CU – VSA024 (AXD1363)]

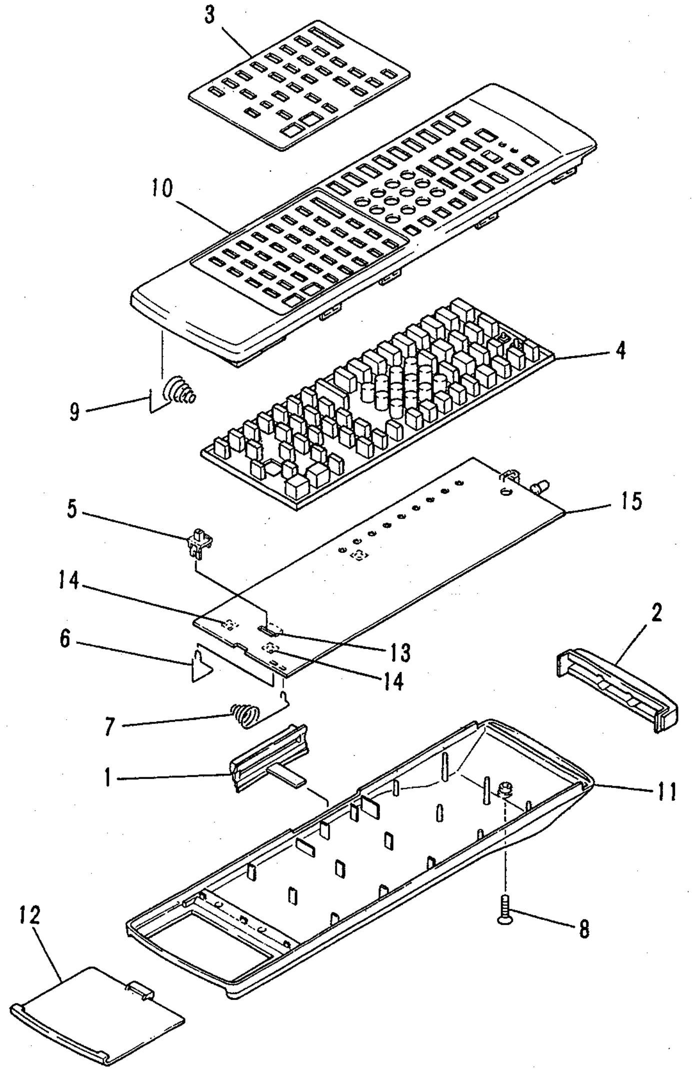
6.1 EXPLODED VIEW AND PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts List

Mark	No.	Description	Parts No.
	1	MODE CHECK KEY	AZA1335
	2	FILTER	AZA1336
	3	PLATE	AZA1480
	4	RUBBER SHEET	AZA1365
	5	KNOB	AZA1349
	6	TERMINAL (+)	AZB1327
	7	TERMINAL (−)	AZB1328
	8	SCREW	AZB1329
	9	TERMINAL (C)	AZB1330
	10	CASE (A)	AZN2089
	11	CASE (B)	AZN2090
	12	BATTERY COVER	AZN2091
	13	SLIDE SW	AZS1117
	14	TACT SW	AZS1118
NSP	15	P. C. BOARD	AZW1130



6.2 ELECTRICAL PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 .... RD1/8PM $\boxed{5}\boxed{6}\boxed{1}$ J
47kΩ → 47 × 10^3 → 473 .... RD1/4PS $\boxed{4}\boxed{7}\boxed{3}$ J
0.5Ω → 0R5 .... RN2H $\boxed{0}\boxed{R}\boxed{5}$ K
1Ω → 010 .... RS1P $\boxed{0}\boxed{1}\boxed{0}$ K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10^1 → 5621 .... RM1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ F

Parts List

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1	μ–COM	ACM001–030
	IC2	IC	AZC1564
	IC3	LOGIC IC	MC74HC138F
	Q1, 2	CHIP TRANSISTOR	2SC3052E
	Q3, 4	TRANSISTOR	2SD1622
	D1	DIODE	DWA010–TE
	D9–17	LED	AZC1573
	D2–6	DIODE	DWA010–TE
	D7	LED	SLR–938C
	D8	DIODE	SPS–503C–3
CAPACITORS			
	C1, 2	CERAMIC CAPACITOR	CCDSL330J50
	C3	CERAMIC CAPACITOR	CCDSL221J50
	C4	CERAMIC CAPACITOR	CKDYX104M25
	C5	ELECT. CAPACITOR	CEAS470M10
	C6	CERAMIC CAPACITOR	CKDYB103K50
	C7	ELECT. CAPACITOR	CEAS221M10
	C8	ELECT. CAPACITOR	CEAS4R7M50
RESISTORS			
	R7, 8	CARBON FILM RESISTOR	RD1/4PMFL1R5J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X1	RESONATOR	AZC1570

6.3 SCHEMATIC DIAGRAM (FOR AXD1363)

NOTE)

JP2 : The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

JP3 : This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JP3 is a terminal for switching whether or not to use that pre-loaded timing data during learning.
This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JP3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

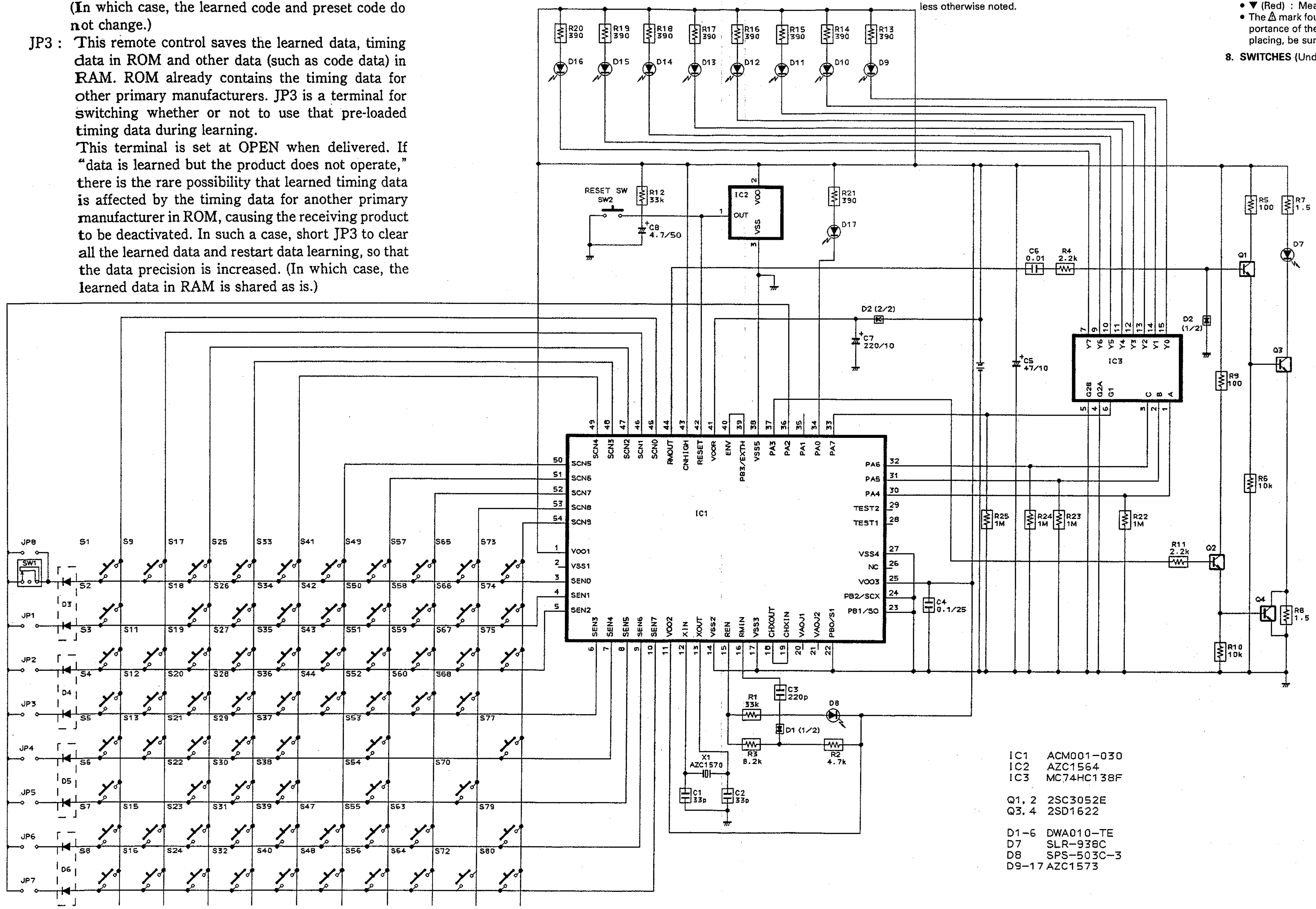
NOTE:

▭ : Indicates a chip resistor.
╪ : Indicates a chip capacitor.
⊏ : Indicates a chip transistor.
⊠ : Indicates a chip diode.

Note: (Type 2)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ : DC voltage (V) at no input signal unless otherwise noted.
   ⇦ mA or ← mA : DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ➡ : Signal route.
   - ⊘ : Adjusting point.
   - ▼ (Red) : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SWITCHES** (Underline indicates switch position):

SW1 : CENT. · BAL./REAR · REAR BAL.
SW2 : RESET
S1 : VCR1
S2 : VCR2
S3 : LD
S4 : TV
S5 : CD
S6 : TUNER
S7 : DECK Ⅰ
S8 : DECK Ⅱ
S9 : DAT
S11 : LEARN
S12 : EDIT
S13 : MULTI COMMAND
S15 : POWER
S16 : ⏮
S17 : REC
S18 : ⏭
S19 : ⏪
S20 : ◀ (SEARCH)
S21 : ⏩
S22 : ⏸
S23 : ■
S24 : ▶
S25 : TV/VCR (+10)
S26 : SELECT (DISP)
S27 : TV FUNC (BAND)
S28 : 1
S29 : 2
S30 : 3
S31 : 4
S32 : 5
S33 : 6
S34 : 7
S35 : 8
S36 : 9
S37 : 10/0
S38 : 11/PGM
S39 : 12/CLEAR
S40 : CUSTOM (TV VOL+)
S41 : SCAN (TV VOL−)
S42 : FREQ/CH (Λ)
S43 : FREQ/CH (V)
S44 : AMP POWER
S47 : SLEEP
S48 : VCR1
S49 : VCR2
S50 : LD
S51 : TV
S52 : VIDEO
S53 : TAPE1/DAT
S54 : TAPE2/MONITOR
S55 : CD
S56 : TUNER
S57 : PHONO
S58 : SIMULATED STEREO
S59 : ACOUSTIC
S60 : VIDEO SIGNAL SELECT
S63 : SURR. MODE
S64 : 3CH LOGIC
S65 : CENTER MODE
S66 : TEST TONE
S67 : MUTING
S68 : EFECT +
S70 : CENTER +
S72 : EFECT −
S73 : REAR L
S74 : REAR R
S75 : DELAY TIME
S77 : CENTER −
S79 : MASTER VOLUME +
S80 : MASTER VOLUME −


R20 390
R19 390
R18 390
R17 390
R16 390
R15 390
R14 390
R13 390
D16
D15
D14
D13
D12
D11
D10
D9
RESET SW
SW2
R12 33k
C8 4.7/50
IC2
VDD
OUT
VSS
R21 390
D17
C6 0.01
R4 2.2k
R5 100
R7 1.5
D7
Q1
D2 (2/2)
C7 220/10
C5 47/10
D2 (1/2)
IC3
Q3
R9 100
R6 10k
IC1
SCN4
SCN3
SCN2
SCN1
SCN0
RMOUT
CNHIGH
RESET
VOOR
ENV
PB3/EXTH
VSS5
PA3
PA2
PA1
PA0
PA7
SCN5
SCN6
SCN7
SCN8
SCN9
VDD1
VSS1
SEN0
SEN1
SEN2
PA6
PA5
PA4
TEST2
TEST1
VSS4
NC
VDD3
PB2/SCX
PB1/SO
SEN3
SEN4
SEN5
SEN6
SEN7
VDD2
XIN
XOUT
VSS2
REN
RMIN
VSS3
CHXOUT
CHXIN
VAOJ1
VAOJ2
PB0/SI
C4 0.1/25
R25 1M
R24 1M
R23 1M
R22 1M
R11 2.2k
Q2
Q4
R8 1.5
R10 10k
C3 220p
R1 33k
D8
D1 (1/2)
R3 8.2k
R2 4.7k
X1 AZC1570
C1 33p
C2 33p
JP8
SW1
JP1
JP2
JP3
JP4
JP5
JP6
JP7
D3
D4
D5
D6
S1
S9
S17
S25
S33
S41
S49
S57
S65
S73
S2
S18
S26
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S42
S50
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S74
S3
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S75
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S12
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S68
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S37
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S77
S6
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S30
S38
S54
S70
S7
S15
S23
S31
S39
S47
S55
S63
S79
S8
S16
S24
S32
S40
S48
S56
S64
S72
S80

IC1 ACM001-030
IC2 AZC1564
IC3 MC74HC138F

Q1, 2 2SC3052E
Q3, 4 2SD1622

D1-6 DWA010-TE
D7 SLR-938C
D8 SPS-503C-3
D9-17 AZC1573

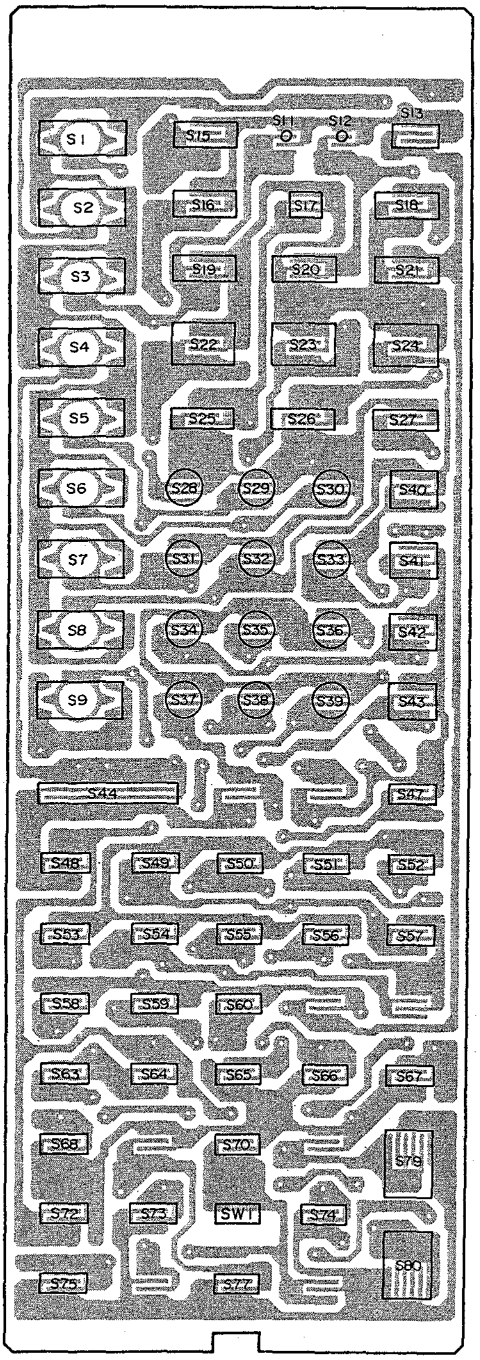
6.4 PCB PATTERN (FOR AXD1363)

: Indicates a chip resistor.

: Indicates a chip capacitor.

: Indicates a chip transistor.

: Indicates a chip diode.


S1
S2
S3
S4
S5
S6
S7
S8
S9
S11
S12
S13
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S16
S17
S18
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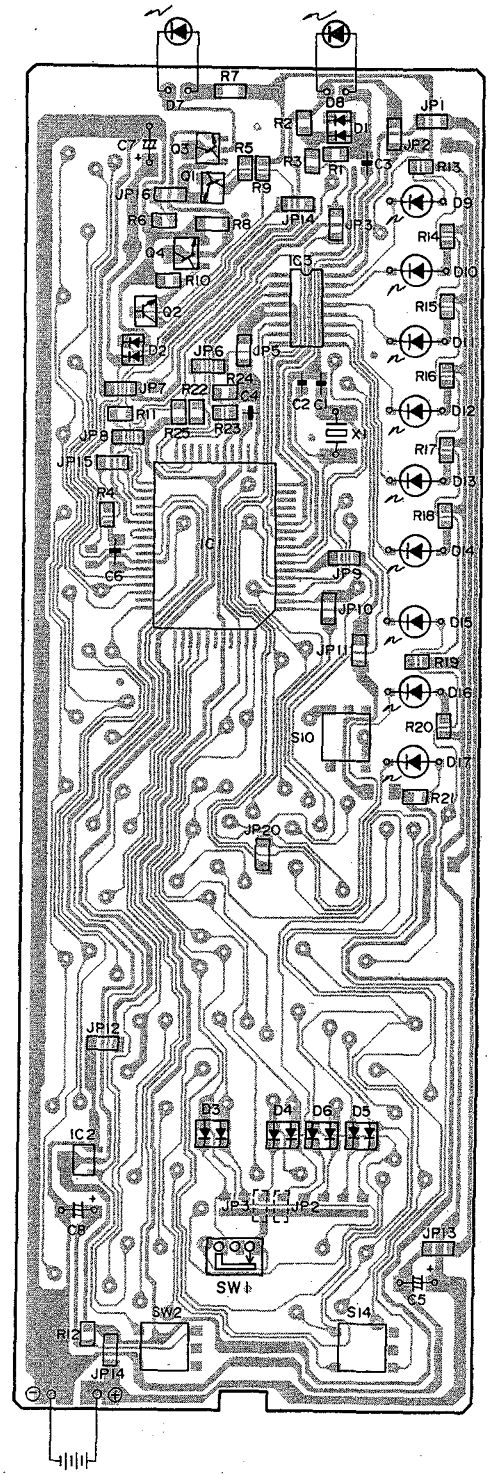
S59
S60
S63
S64
S65
S66
S67
S68
S70
S79
S72
S73
SW1
S74
S80
S75
S77


D7
R7
D8
D1
R2
C7
Q3
R5
Q1
R3
R1
C3
JP1
JP2
R13
JP16
R9
D9
R6
R8
JP14
JP3
R14
Q4
IC3
D10
R10
Q2
R15
D11
D2
JP6
JP5
R16
R24
JP7
R22
C4
C2
C1
D12
R11
R25
R23
X1
JP8
R17
JP15
D13
R4
R18
IC1
D14
C6
JP9
JP10
D15
JP11
R19
D16
S10
R20
D17
R21
JP20
JP12
D3
D4
D6
D5
IC2
JP3
JP2
C8
JP13
SW1
C5
SW2
S14
R12
JP14
⊖
⊕

7. FOR HB AND HL TYPES

NOTES :

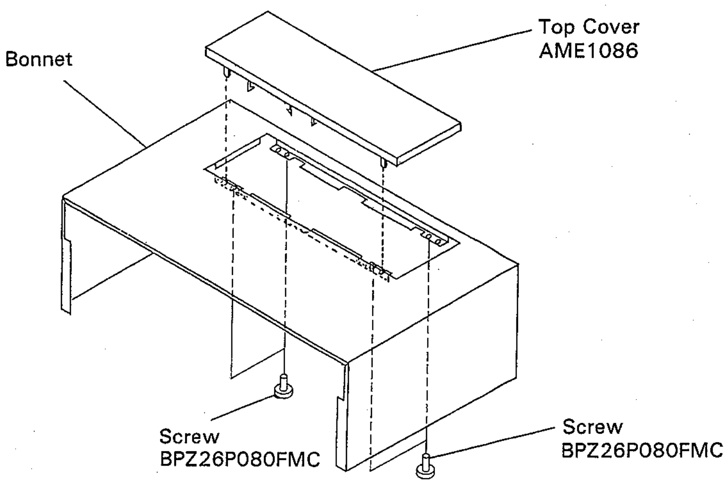
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

CONTRAST OF MISCELLANEOUS PARTS

VSA－D802S/HB, HL and HEZ have the same construction except for the following :

Mark	Symbol & Description	Part No.			Remarks
		HEZ	HB	HL	
NSP	FRONT SP assembly	AWZ4997	AWZ5053	AWZ5053	
	AMP assembly	AWZ4998	AWZ5051	AWZ5051	
NSP	SP SW assembly	AWZ4535	AWZ4289	AWZ4289	
	POWER SUPPLY assembly	AWZ4999	AWZ5052	AWZ5052	
	REAR SP CENTER SP assembly	AWZ5000	AWZ5054	AWZ5054	
	FL. U－COM assembly	AWK1729	AWK1552	AWK1552	
⚠	AC Power cord	ADG1049	ADG1118	ADG1049	
NSP	Name plate (PAP)	AAL2067	AAL2068	AAL2069	
	Screw	ABA1047	ABA－298	ABA－298	For REAR SP CENTER SP assembly (X3)
	FL Filter	AAK2364	AAK2364	AAK2313	
	Operating instructions (Dutch, Swedish, Spanish, Portuguese)	ARC1429	....	....	
	Operating instructions (English, French, German, Italian)	ARE1281	....	....	
	Operating instructions (English)	....	ARE1282	ARE1283	
	Packing case	AHD2555	AHD2555	AHD2556	
NSP	Air cap (For AC power cord)	....	AHG1087	....	For packing
	Bonnet (MTL)	ANE1373	ANE1426	ANE1426	
	Top cover	....	AME1086	AME1086	

For HB and HL Types



FRONT SP ASSEMBLY

AWZ5053 and AWZ4997 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4997	AWZ5053	
	L2901 −L2904	ATH−133	....	
	C2901 −C2904	CKCYF103Z50	....	
	C2905, C2906	CKCYB681K50	....	
	R2901 −R2904	RD1/2PMF101J	....	

AMP ASSEMBLY

AWZ5051 and AWZ4998 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4998	AWZ5051	
	Q2925	2SA1145	....	
	D2925, D2926	HSS104−02	....	
	D2927, D2928	RD4.3ESB	....	
	L102−L104	ATH1009	ATH1004	
	C125, C126	CKCYB472K50	CKCYB222K50	
	C209	....	CEAS470M25	
	C2920	ACG1005	....	
	R147, R148, R220	RD1/4PMF101J	RD1/4PMF100J	
	R209, R211	....	RD1/8PM472J	
	R2921, R2923, R2924	RS1LMF100J	....	
	R2925	RD1/4PMF680J	....	
	R2926	RD1/8PM224J	....	

SP SW ASSEMBLY

AWZ4289 and AWZ4535 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4535	AWZ4289	
	C2912, C2913	CKCYB392K50	....	
	R2912, R2913	RS1LMF681J	....	

POWER SUPPLY ASSEMBLY

AWZ5052 and AWZ4999 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4999	AWZ5052	
	C2929	CKDYB102K50	....	
	R2922	RS1LMF100J	....	

REAR SP CENTER SP ASSEMBLY

AWZ5054 and AWZ5000 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ5000	AWZ5054	
	L251, L252	ATH1009	ATH1004	
	L2907, L2909, L2910	ATH−133	....	
	C2908	CKDYF473Z50	....	
	C2909, C2934	CKDYF103Z50	....	
	C2910, C2935	CKDYX104M25	....	
	C2930, C2933	CKCYF223Z50	....	
	R255, R256	RD1/4PMF101J	RD1/4PMF100J	
	R2907, R2909, R2910	RD1/2PMF101J	....	
	R2915	RD1/4PMF270J	....	

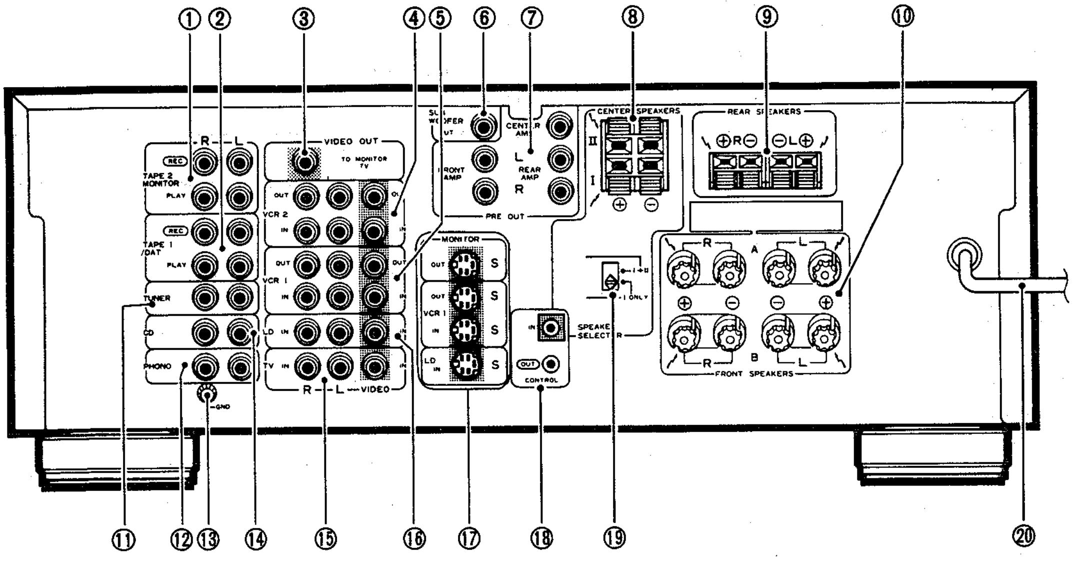
FL U-COM ASSEMBLY

AWK1552 and AWK1729 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWK1729	AWK1552	
	C3000−C3003	CKPUYB681K50	....	
	REMOTE RECEIVER UNIT	AXX1033	AXX1010	

8. PANEL FACILITIES

REAR PANEL FACILITIES


①
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④
⑤
⑥
⑦
⑧
⑨
⑩
R
L
REC
TAPE 2 MONITOR
PLAY
REC
TAPE 1 /DAT
PLAY
TUNER
CD
PHONO
GND
VIDEO OUT
TO MONITOR TV
OUT
VCR 2
IN
OUT
VCR 1
IN
LD IN
TV IN
R
L
VIDEO
MONITOR
OUT
S
OUT
VCR 1
IN
LD IN
SUB WOOFER OUT
FRONT AMP
CENTER AMP
L
REAR AMP
R
PRE OUT
CENTER SPEAKERS
II
I
⊕
⊖
REAR SPEAKERS
⊕R⊖ ⊖L⊕
I+II
I ONLY
IN
SPEAKER SELECTOR
OUT
CONTROL
A
B
R
L
FRONT SPEAKERS
⑪
⑫
⑬
⑭
⑮
⑯
⑰
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⑲
⑳

① TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the amplifier with a pin plug connecting cord.

Connecting for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the amplifier with a pin plug connecting cord.

② TAPE 1/DAT jacks

Use these to connect the cassette deck or DAT (digital audio tape) deck.

Connecting for Recording

The tape recording jack (REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the amplifier with a pin plug connecting cord.

Connecting for Playback

Connect the PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the amplifier with a pin plug connecting cord.

③ VIDEO OUT (TV MONITOR) jack

Connect to a monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2, or LD player connected to this unit.

④ VCR 2 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 1 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

⑤ VCR 1 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑥ SUB WOOFER OUT jack

If you want to boost the low frequencies, or you want to use the unit in a 3D system, connect to a sub woofer power amplifier.

⑦ PRE OUT jacks

[FRONT AMP]

When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

[CENTER AMP]

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

[REAR AMP]

When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

⑧ CENTER SPEAKER terminals

Connect the center speaker to these terminals. (See ⑲)

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

⑨ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use rear speakers of impedance 8 Ω — 16 Ω.

⑩ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.
B: Connect to the second set of speakers.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use speakers of impedance 4 Ω — 16 Ω.

⑪ TUNER input jacks

Connect to the output jacks of the tuner.

⑫ PHONO input jacks

Connect to the output cables from a turntable.

⑬ GND terminal

Connect the turntable ground lead to this terminal.

⑭ CD input jacks

Connect to the output jacks of a compact disc player.

⑮ TV jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

[VIDEO IN]
Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]
Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑯ LD jacks

[VIDEO IN]
When watching the video image from an LD player, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L,R)]
When playing back the audio channel from an LD player, connect its AUDIO OUTPUT jacks here.

⑰ S (connector) video jacks (LD, VCR, MONITOR)

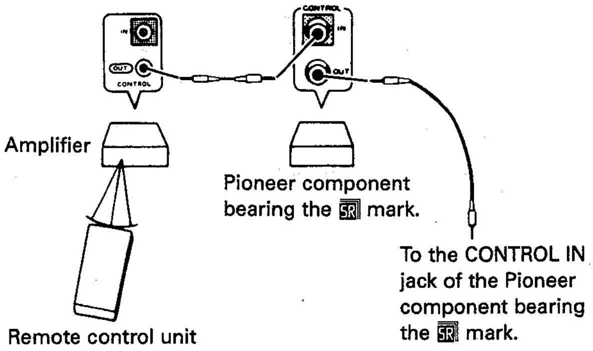
When used in conjunction with a VCR, LD player, or TV monitor equipped with S video jacks, connect to these jacks.

⑱ CONTROL IN/OUT jacks

IN: Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.
OUT: Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE:

The amplifier's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the amplifier's IN jack is connected.


IN
OUT
CONTROL
CONTROL
IN
OUT
Amplifier
Pioneer component bearing the SR mark.
To the CONTROL IN jack of the Pioneer component bearing the SR mark.
Remote control unit

⑲ CENTER SPEAKER SELECTOR switch

This switch changes the speaker impedance when only one center speaker is connected, or two speakers are connected.

When only one speaker is connected:
Be sure to set the switch to "I ONLY" (down side), and always connect a speaker with impedance of 8 Ω — 16 Ω to the I terminal.

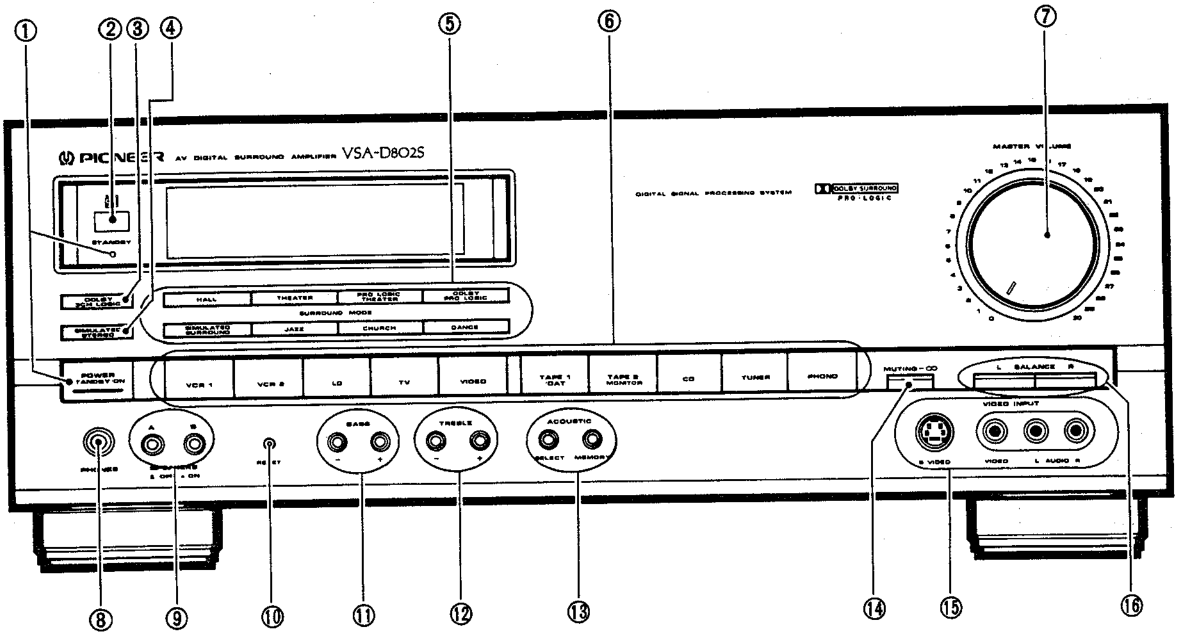
When two speakers are connected:
Be sure to switch to "I + II" (up side), and always use speakers with an impedance of 4 Ω — 16 Ω.

NOTE:

Switch the SPEAKER SELECTOR when the unit power supply is at STANDBY. Do not switch the selector when the power supply is ON.

⑳ Power cord

FRONT PANEL FACILITIES


①
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⑦
PIONEER AV DIGITAL SURROUND AMPLIFIER VSA-D802S
STANDBY
DOLBY 3CH LOGIC
SIMULATED STEREO
POWER STANDBY/ON
HALL
THEATER
PRO LOGIC THEATER
DOLBY PRO LOGIC
SURROUND MODE
SIMULATED SURROUND
JAZZ
CHURCH
DANCE
DIGITAL SIGNAL PROCESSING SYSTEM
DOLBY SURROUND PRO·LOGIC
MASTER VOLUME
VCR 1
VCR 2
LD
TV
VIDEO
TAPE 1 DAT
TAPE 2 MONITOR
CD
TUNER
PHONO
MUTING
L BALANCE R
VIDEO INPUT
PHONES
A
B
SPEAKERS
RESET
BASS
TREBLE
ACOUSTIC
SELECT
MEMORY
S VIDEO
VIDEO
L AUDIO R
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑯

① POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]
When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:
When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② Remote sensor

③ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the DOLBY SURROUND mark.

④ SIMULATED STEREO button

Press to produce a simulated stereo effect when listening to monaural sources (for example, normal AM or TV broadcasts). "SIMULATED STEREO" appears on the display section.

NOTE:
- *This effect is not produced through the rear speakers.*
- *Use with the SURROUND MODE in the OFF position.*

⑤ SURROUND MODE selector buttons

⑥ Input selector buttons

VCR 1: Press when performing playback on a first VCR unit.
VCR 2: Press when performing playback on a second VCR unit.
LD: Press when performing playback on an LD player.
TV: Press when using a TV tuner connected to the TV jacks.
VIDEO: Press when performing playback on a VCR connected to VIDEO INPUT jacks on the front panel.
TAPE 1/DAT: Press when performing playback on a DAT or cassette deck.
TAPE 2 MONITOR: Press when performing playback on a second cassette deck or second DAT and when monitoring recording.
CD: Press when playing compact discs on a CD player.
TUNER: Press when listening to radio broadcasts.
PHONO: Press when playing records on a turntable.

⑦ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center, and rear speakers.

⑧ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from the speakers and listen only through the headphones.

⑨ SPEAKERS buttons (A, B) ■ OFF ▂ ON

ON/OFF switches for the A and B speaker systems.

NOTE:
No sound will be heard through the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

⑩ RESET button

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions.
If you press this button when the power is ON, the unit switches to POWER STANDBY, and the entire contents of the memory are erased.

⑪ BASS control buttons

Use to adjust the low-frequency level. Press the + button to increase the low-frequency level, and the – button to decrease it.
The TONE indicator appears on the display section.
When both buttons (–, +) of the BASS control are pressed simultaneously, the bass response will be set to the flat (normal) condition.

⑫ TREBLE control buttons

Use to adjust the high-frequency level. Press the + button to increase the high-frequency level, and the – button to decrease it.
The TONE indicator appears on the display section.
When both buttons (–, +) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

⑬ ACOUSTIC buttons

MEMORY:
Pressing this button will result in the memorization of the sound quality (tone control condition).
SELECT:
- This button is used to preset the five acoustic memories (A—E).
- This button is also used to recall previously set sound quality settings. Each time you press the button, the sound quality setting advances in the order shown below.

→ FLAT → LOUDNESS → A → B → C → D → E

FLAT:	For flat (normal) frequency response.
LOUDNESS:	Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.
A—E:	Memorized acoustic memory settings.

⑭ MUTING (–∞) button

Press to temporarily cut off the sound volume. The display section MUTING indicator will flash. When pressed again, the sound will return to its previous level.

⑮ VIDEO INPUT jacks

Video components such as a VCR or TV camera, etc. can be connected here.

⑯ BALANCE buttons

Use these to simultaneously adjust the left and right sound volume balance on the front and rear speakers.
L: Press to decrease the sound on the right side.
R: Press to decrease the sound on the left side.
Press L and R together to bring the volume balance back to center.

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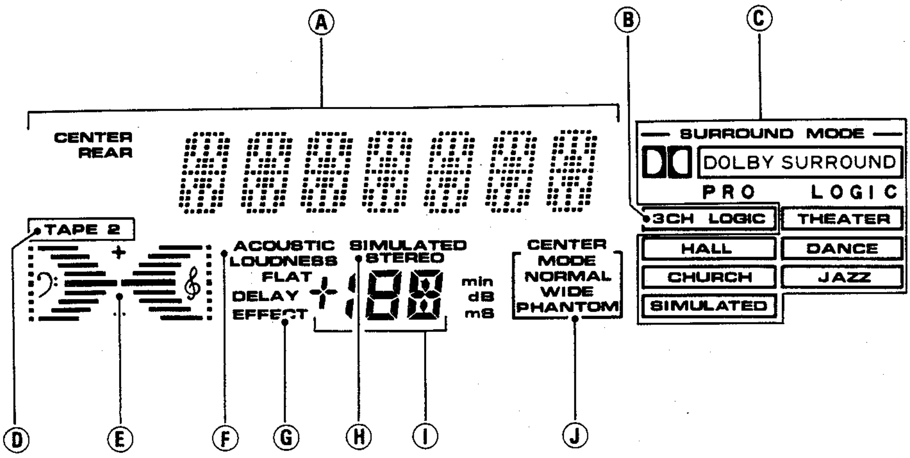
DISPLAY SECTION


Ⓐ
Ⓑ
Ⓒ
CENTER
REAR
SURROUND MODE
DOLBY SURROUND
PRO LOGIC
3CH LOGIC
THEATER
HALL
DANCE
CHURCH
JAZZ
SIMULATED
TAPE 2
+
ACOUSTIC
LOUDNESS
FLAT
DELAY
EFFECT
SIMULATED
STEREO
min
dB
mS
CENTER
MODE
NORMAL
WIDE
PHANTOM
Ⓓ
Ⓔ
Ⓕ
Ⓖ
Ⓗ
Ⓘ
Ⓙ

Ⓐ Character/balance display

- This displays the name of the component selected with the input selector, etc.
- It also displays the rear level, center level, and balance settings during adjustment.

Ⓑ DOLBY 3CH LOGIC indicator

Ⓒ SURROUND MODE indicators

Ⓓ TAPE 2 indicator

Lights up when the input selector is set to TAPE 2 MONITOR ON.

Ⓔ TONE level indicator

Shows the settings of the BASS and TREBLE buttons.

Ⓕ ACOUSTIC display

Shows the setting of the ACOUSTIC MEMORY.

Ⓖ DELAY/EFFECT indicator

Ⓗ SIMULATED STEREO indicator

Ⓘ ACOUSTIC/DELAY TIME/EFFECT LEVEL/SLEEP TIME display

- Indicates delay time (ms) when using DOLBY PRO LOGIC SURROUND.
- Indicates rear level and center level (dB).
- Indicates sleep timer settings (min).
- Displays Acoustic memory letters A to E.
- Displays surround effect level from 10 to 100.

Ⓙ CENTER MODE indicators

These display the center mode (NORMAL, WIDE, PHANTOM) during DOLBY PRO LOGIC SURROUND. With DOLBY 3CH LOGIC, NORMAL or WIDE center mode will be indicated.

9. SPECIFICATIONS

Amplifier Section

Continuous power output	
Stereo	55 W + 55 W (8 Ω, 20 Hz — 20,000 Hz, T.H.D. 0.05 %)
1 kHz (DIN)	100 W + 100 W (4 Ω)
Continuous power output (DIN: 1 kHz, T.H.D. 1 %)	
Front	55 W + 55 W (4 Ω)
Center	55 W (4 Ω)
Rear	20 W + 20 W (8 Ω)
Dynamic Power (2 Ω/4 Ω/8 Ω)	145 W/125 W/85 W
Total Harmonic Distorsion (Front)	
(20 Hz — 20,000 Hz, 8 Ω, continuous rated power output)	0.05 %
Input (Sensitivity/Impedance)	
PHONO MM	2.5 mV/47 kΩ
CD, TAPE 1/DAT, TAPE 2, TUNER, LD, VCR 1, VCR 2, TV, VIDEO	150 mV/47 kΩ
PHONO Overload Level (T.H.D. 1 %, 1 kHz)*	
PHONO MM	130 mV
Frequency Response	
PHONO MM	20 Hz — 20,000 Hz ±0.3 dB
CD, TAPE 1/DAT, TAPE 2, TUNER, LD, VCR 1, VCR 2, TV, VIDEO	5 Hz — 50,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)	
TAPE 1/DAT REC, TAPE 2 REC	150 mV/2.2 kΩ
VCR 1 OUT, VCR 2 OUT	150 mV/2.2 kΩ
PRE OUT	1 V/2.2 kΩ
Tone Control	
BASS	±8 dB (100 Hz)
TREBLE	±8 dB (10 kHz)
Muting	—∞
Loudness Contour	6 dB (100 Hz) 3 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short-circuited A-network)	
PHONO MM	79 dB
CD, TAPE 1/DAT, TAPE 2, TUNER, LD, VCR 1, VCR 2, TV, VIDEO	97 dB
Signal-to-Noise Ratio (DIN: continuous rated power output/ 50 mW)	
PHONO MM	69 dB/57 dB
CD, TUNER, AUX, TAPE, VCR	86 dB/59 dB

**** Measured by Audio Spectrum Analyzer.***

VIDEO Section

Input (Sensitivity/Impedance)	
VCR 1, VCR 2, LD, TV, VIDEO	1 Vp-p/75 Ω
Output (Level/Impedance)	
VCR 1, VCR 2, MONITOR	1 Vp-p/75 Ω
Frequency Response	
VCR 1, VCR 2, LD, TV, VIDEO → MONITOR	5 Hz — 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio	60 dB

S-VIDEO Section

Input (Sensitivity/Impedance)	
VCR 1, LD, VIDEO	1 Vp-p/75 Ω (Luminance Signal) 0.286 Vp-p/75 Ω (Color Signal)
Output (Level/Impedance)	
VCR 1, MONITOR	1 Vp-p/75 Ω (Luminance Signal) 0.286 Vp-p/75 Ω (Color Signal)
Frequency Response	
VCR 1, LD → MONITOR	5 Hz — 10 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio	60 dB

Surround Section

Rear Frequency Response	30 Hz — 7,000 Hz $^{+0}_{-3}$ dB
Delay Time (DOLBY PRO LOGIC SURROUND)	
Variable Range	16 ms — 30 ms
Step	2 ms

Miscellaneous

Power Requirements	a.c. 220—230 Volts ~, 50/60 Hz
Power Consumption	600 W
Dimensions	420 (W) x 162 (H) x 417 (D) mm
Weight (without package)	10.4 kg

Accessories

Remote control unit	1
Alkaline dry cell batteries (size "AA" (IEC LR6/AM-3))	2
Operating Instructions	1

NOTE:

Specifications and design are subject to possible modifications without notice due to improvements.